

151015 mir29A NEON a

Experiment

|               |                           |                    |   |
|---------------|---------------------------|--------------------|---|
| Creation Date | 18/04/2020 04:53:39 p. m. | Last Modified Date | 18/04/2020 05:22:16 p. m.               |
| Operator      | System Admin              | Owner              | System Admin                            |
| Start Time    | 15/10/2015 03:49:00 p. m. | End Time           | 15/10/2015 05:32:21 p. m.               |
| Run State     | Completed                 | Software Version   | LCS480 1.5.0.39 (Converted from LCS4 4. |
| Macro         |                           | Macro Owner        |   |
| Macro Status  |                           |                    |   |
| Templates     | 04FEB14_PATY Run Protocol | Plate ID           |   |
| Test ID       |                           | Lot ID             |   |
| Color Comp ID |                           |                    |   |
| Run Notes     |                           |                    |   |

Programs

| Program Name | Program          |                 |                  |                       |                 |                |                     |
|--------------|------------------|-----------------|------------------|-----------------------|-----------------|----------------|---------------------|
| Cycles       | 1                | Analysis Mode   | None             |                       |                 |                |                     |
| Target (°C)  | Acquisition Mode | Hold (hh:mm:ss) | Ramp Rate (°C/s) | Acquisitions (per °C) | Sec Target (°C) | Step size (°C) | Step Delay (cycles) |
| 95           | None             | 00:10:00        | 20.00            |                       | 0               | 0              | 0                   |

| Program Name | Program          |                 |                  |                       |                 |                |                     |
|--------------|------------------|-----------------|------------------|-----------------------|-----------------|----------------|---------------------|
| Cycles       | 50               | Analysis Mode   | Quantification   |                       |                 |                |                     |
| Target (°C)  | Acquisition Mode | Hold (hh:mm:ss) | Ramp Rate (°C/s) | Acquisitions (per °C) | Sec Target (°C) | Step size (°C) | Step Delay (cycles) |
| 95           | None             | 00:00:10        | 20.00            |                       | 0               | 0              | 0                   |
| 55           | None             | 00:00:30        | 20.00            |                       | 0               | 0              | 0                   |
| 72           | Single           | 00:00:30        | 20.00            |                       | 0               | 0              | 0                   |

| Program Name | Program          |                 |                  |                       |                 |                |                     |
|--------------|------------------|-----------------|------------------|-----------------------|-----------------|----------------|---------------------|
| Cycles       | 1                | Analysis Mode   | None             |                       |                 |                |                     |
| Target (°C)  | Acquisition Mode | Hold (hh:mm:ss) | Ramp Rate (°C/s) | Acquisitions (per °C) | Sec Target (°C) | Step size (°C) | Step Delay (cycles) |
| 40           | None             | 00:10:00        | 20.00            |                       | 0               | 0              | 0                   |

Samples

| Sample Count | 32          |    |          |              |
|--------------|-------------|----|----------|--------------|
| Subset       | All Samples |    |          |              |
| Pos          | Name        | ID | Repl. Of | Sample Notes |
| A1           | M1          |    | A1       |              |
| A2           | M1          |    | A1       |              |

**Samples**

| Sample Count | 32          |    |          |              |
|--------------|-------------|----|----------|--------------|
| Subset       | All Samples |    |          |              |
| Pos          | Name        | ID | Repl. Of | Sample Notes |
| A3           | M2          |    | A3       |              |
| A4           | M2          |    | A3       |              |
| A5           | M3          |    | A5       |              |
| A6           | M3          |    | A5       |              |
| A7           | M4          |    | A7       |              |
| A8           | M4          |    | A7       |              |
| B1           | M5          |    | B1       |              |
| B2           | M5          |    | B1       |              |
| B3           | M6          |    | B3       |              |
| B4           | M6          |    | B3       |              |
| B5           | M7          |    | B5       |              |
| B6           | M7          |    | B5       |              |
| B7           | M8          |    | B7       |              |
| B8           | M8          |    | B7       |              |
| C1           | M9          |    | C1       |              |
| C2           | M9          |    | C1       |              |
| C3           | M10         |    | C3       |              |
| C4           | M10         |    | C3       |              |
| C5           | M11         |    | C5       |              |
| C6           | M11         |    | C5       |              |
| C7           | M12         |    | C7       |              |
| C8           | M12         |    | C7       |              |
| D1           | M13         |    | D1       |              |
| D2           | M13         |    | D1       |              |
| D3           | M14         |    | D3       |              |
| D4           | M14         |    | D3       |              |
| D5           | M15         |    | D5       |              |
| D6           | M15         |    | D5       |              |
| D7           | NEG RT      |    |          |              |
| D8           | NTC         |    |          |              |

**Revision History**

| Revision | Date | User | Reason |
|----------|------|------|--------|
|          |      |      |        |

**Abs Quant/2nd Derivative Max for All Samples (Abs Quant/2nd Derivative Max)**

## Settings

|                    |                 |       |  |
|--------------------|-----------------|-------|--|
| Channel            | 470-530         |       |  |
| Color Compensation | Off             |       |  |
| Program            | Program         | Units |  |
| Mode               | High Confidence |       |  |

|             |             |
|-------------|-------------|
| Subset Name | All Samples |
|-------------|-------------|

## Results

| Inc                                 | Pos | Name | Type    | CP    | Concentration | Standard | Status |
|-------------------------------------|-----|------|---------|-------|---------------|----------|--------|
| <input checked="" type="checkbox"/> | A1  | M1   | Unknown | 36.65 |               |          |        |
| <input checked="" type="checkbox"/> | A2  | M1   | Unknown | 37.88 |               |          |        |
| <input checked="" type="checkbox"/> | A3  | M2   | Unknown | 36.77 |               |          |        |
| <input checked="" type="checkbox"/> | A4  | M2   | Unknown | 37.99 |               |          |        |
| <input checked="" type="checkbox"/> | A5  | M3   | Unknown | 36.64 |               |          |        |
| <input checked="" type="checkbox"/> | A6  | M3   | Unknown | 38.90 |               |          |        |
| <input checked="" type="checkbox"/> | A7  | M4   | Unknown | 36.07 |               |          |        |
| <input checked="" type="checkbox"/> | A8  | M4   | Unknown | 38.34 |               |          |        |
| <input checked="" type="checkbox"/> | B1  | M5   | Unknown | 36.02 |               |          |        |
| <input checked="" type="checkbox"/> | B2  | M5   | Unknown | 36.33 |               |          |        |
| <input checked="" type="checkbox"/> | B3  | M6   | Unknown | 36.79 |               |          |        |
| <input checked="" type="checkbox"/> | B4  | M6   | Unknown | 36.94 |               |          |        |
| <input checked="" type="checkbox"/> | B5  | M7   | Unknown | 36.83 |               |          |        |
| <input checked="" type="checkbox"/> | B6  | M7   | Unknown | 36.85 |               |          |        |
| <input checked="" type="checkbox"/> | B7  | M8   | Unknown | 37.27 |               |          |        |
| <input checked="" type="checkbox"/> | B8  | M8   | Unknown | 37.10 |               |          |        |
| <input checked="" type="checkbox"/> | C1  | M9   | Unknown | 36.78 |               |          |        |
| <input checked="" type="checkbox"/> | C2  | M9   | Unknown | 37.85 |               |          |        |
| <input checked="" type="checkbox"/> | C3  | M10  | Unknown | 36.95 |               |          |        |
| <input checked="" type="checkbox"/> | C4  | M10  | Unknown | 37.00 |               |          |        |
| <input checked="" type="checkbox"/> | C5  | M11  | Unknown | 37.35 |               |          |        |
| <input checked="" type="checkbox"/> | C6  | M11  | Unknown | 37.92 |               |          |        |
| <input checked="" type="checkbox"/> | C7  | M12  | Unknown | 38.92 |               |          |        |
| <input checked="" type="checkbox"/> | C8  | M12  | Unknown | 37.28 |               |          |        |
| <input checked="" type="checkbox"/> | D1  | M13  | Unknown | 37.92 |               |          |        |
| <input checked="" type="checkbox"/> | D2  | M13  | Unknown | 36.75 |               |          |        |
| <input checked="" type="checkbox"/> | D3  | M14  | Unknown | 36.98 |               |          |        |
| <input checked="" type="checkbox"/> | D4  | M14  | Unknown | 37.37 |               |          |        |
| <input checked="" type="checkbox"/> | D5  | M15  | Unknown | 37.92 |               |          |        |
| <input checked="" type="checkbox"/> | D6  | M15  | Unknown | 37.28 |               |          |        |

## Results

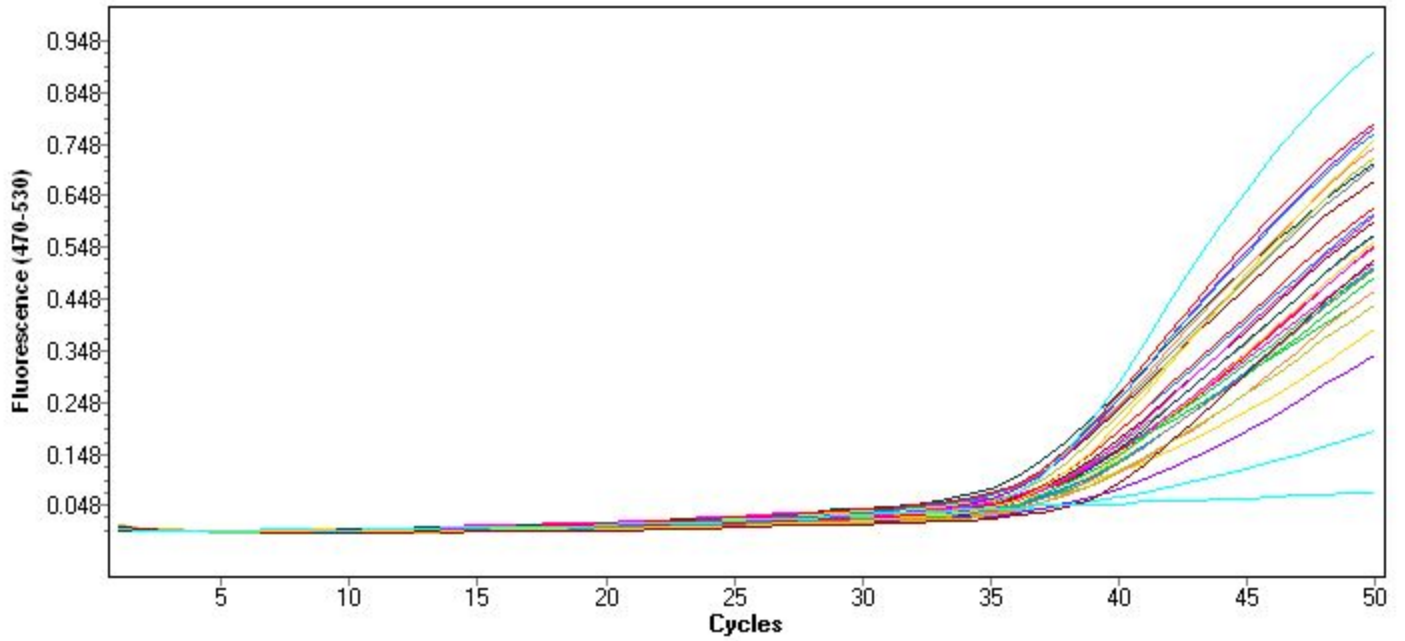
| Inc                                 | Pos | Name   | Type    | CP    | Concentration | Standard | Status |
|-------------------------------------|-----|--------|---------|-------|---------------|----------|--------|
| <input checked="" type="checkbox"/> | D7  | NEG RT | Unknown | 39.26 |               |          |        |
| <input checked="" type="checkbox"/> | D8  | NTC    | Unknown |       |               |          |        |

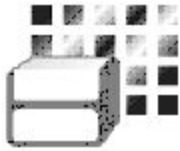
## Statistics

| Samples | Mean Cp | Std Cp | Mean conc | Std conc |
|---------|---------|--------|-----------|----------|
| A1, A2  | 37.26   | 0.87   |           |          |
| A3, A4  | 37.38   | 0.87   |           |          |
| A5, A6  | 37.77   | 1.60   |           |          |
| A7, A8  | 37.20   | 1.61   |           |          |
| B1, B2  | 36.18   | 0.22   |           |          |
| B3, B4  | 36.86   | 0.10   |           |          |
| B5, B6  | 36.84   | 0.02   |           |          |
| B7, B8  | 37.18   | 0.12   |           |          |
| C1, C2  | 37.32   | 0.75   |           |          |
| C3, C4  | 36.97   | 0.04   |           |          |
| C5, C6  | 37.64   | 0.41   |           |          |
| C7, C8  | 38.10   | 1.16   |           |          |
| D1, D2  | 37.34   | 0.82   |           |          |
| D3, D4  | 37.17   | 0.28   |           |          |
| D5, D6  | 37.60   | 0.46   |           |          |

### Amplification Curves

|         |         |         |         |         |         |            |         |
|---------|---------|---------|---------|---------|---------|------------|---------|
| A1: M1  | A2: M1  | A3: M2  | A4: M2  | A5: M3  | A6: M3  | A7: M4     | A8: M4  |
| B1: M5  | B2: M5  | B3: M6  | B4: M6  | B5: M7  | B6: M7  | B7: M8     | B8: M8  |
| C1: M9  | C2: M9  | C3: M10 | C4: M10 | C5: M11 | C6: M11 | C7: M12    | C8: M12 |
| D1: M13 | D2: M13 | D3: M14 | D4: M14 | D5: M15 | D6: M15 | D7: NEG RT | D8: NTC |





**180815MIR 486 5P NEONATOS\_b**

**Experiment**

|               |                           |                    |   |
|---------------|---------------------------|--------------------|---|
| Creation Date | 18/04/2020 04:53:46 p. m. | Last Modified Date | 18/04/2020 05:23:20 p. m.               |
| Operator      | System Admin              | Owner              | System Admin                            |
| Start Time    | 18/08/2015 12:57:21 p. m. | End Time           | 18/08/2015 02:15:11 p. m.               |
| Run State     | Completed                 | Software Version   | LCS480 1.5.0.39 (Converted from LCS4 4. |
| Macro         |                           | Macro Owner        |   |
| Macro Status  |                           |                    |   |
| Templates     | 04FEB14_PATY Run Protocol | Plate ID           |   |
| Test ID       |                           | Lot ID             |   |
| Color Comp ID |                           |                    |   |
| Run Notes     |                           |                    |   |

**Programs**

| Program Name | Program          |                 |                  |                       |                 |                |                     |
|--------------|------------------|-----------------|------------------|-----------------------|-----------------|----------------|---------------------|
| Cycles       | 1                | Analysis Mode   | None             |                       |                 |                |                     |
| Target (°C)  | Acquisition Mode | Hold (hh:mm:ss) | Ramp Rate (°C/s) | Acquisitions (per °C) | Sec Target (°C) | Step size (°C) | Step Delay (cycles) |
| 95           | None             | 00:10:00        | 20.00            |                       | 0               | 0              | 0                   |

| Program Name | Program          |                 |                  |                       |                 |                |                     |
|--------------|------------------|-----------------|------------------|-----------------------|-----------------|----------------|---------------------|
| Cycles       | 50               | Analysis Mode   | Quantification   |                       |                 |                |                     |
| Target (°C)  | Acquisition Mode | Hold (hh:mm:ss) | Ramp Rate (°C/s) | Acquisitions (per °C) | Sec Target (°C) | Step size (°C) | Step Delay (cycles) |
| 95           | None             | 00:00:10        | 20.00            |                       | 0               | 0              | 0                   |
| 60           | None             | 00:00:30        | 20.00            |                       | 0               | 0              | 0                   |
| 72           | Single           | 00:00:01        | 20.00            |                       | 0               | 0              | 0                   |

| Program Name | Program          |                 |                  |                       |                 |                |                     |
|--------------|------------------|-----------------|------------------|-----------------------|-----------------|----------------|---------------------|
| Cycles       | 1                | Analysis Mode   | None             |                       |                 |                |                     |
| Target (°C)  | Acquisition Mode | Hold (hh:mm:ss) | Ramp Rate (°C/s) | Acquisitions (per °C) | Sec Target (°C) | Step size (°C) | Step Delay (cycles) |
| 40           | None             | 00:10:00        | 20.00            |                       | 0               | 0              | 0                   |

**Samples**

| Sample Count | 32          |    |          |              |
|--------------|-------------|----|----------|--------------|
| Subset       | All Samples |    |          |              |
| Pos          | Name        | ID | Repl. Of | Sample Notes |
| A1           | M47         |    | A1       |              |
| A2           | M47         |    | A1       |              |

**Samples**

| Sample Count | 32          |    |          |              |
|--------------|-------------|----|----------|--------------|
| Subset       | All Samples |    |          |              |
| Pos          | Name        | ID | Repl. Of | Sample Notes |
| A3           | M48         |    | A3       |              |
| A4           | M48         |    | A3       |              |
| A5           | M49         |    | A5       |              |
| A6           | M49         |    | A5       |              |
| A7           | M50         |    | A7       |              |
| A8           | M50         |    | A7       |              |
| B1           | M135J       |    | B1       |              |
| B2           | M135J       |    | B1       |              |
| B3           | M136        |    | B3       |              |
| B4           | M136        |    | B3       |              |
| B5           | M137        |    | B5       |              |
| B6           | M137        |    | B5       |              |
| B7           | M138        |    | B7       |              |
| B8           | M138        |    | B7       |              |
| C1           | M139        |    | C1       |              |
| C2           | M139        |    | C1       |              |
| C3           | M140        |    | C3       |              |
| C4           | M140        |    | C3       |              |
| C5           | M141        |    | C5       |              |
| C6           | M141        |    | C5       |              |
| C7           | M142        |    | C7       |              |
| C8           | M142        |    | C7       |              |
| D1           | M143        |    | D1       |              |
| D2           | M143        |    | D1       |              |
| D3           | M144        |    | D3       |              |
| D4           | M144        |    | D3       |              |
| D5           | M88         |    | D5       |              |
| D6           | M88         |    | D5       |              |
| D7           | NEG RT      |    |          |              |
| D8           | NTC         |    |          |              |

**Revision History**

| Revision | Date | User | Reason |
|----------|------|------|--------|
|          |      |      |        |

**Abs Quant/2nd Derivative Max for All Samples (Abs Quant/2nd Derivative Max)**

## Settings

|                    |                 |       |  |
|--------------------|-----------------|-------|--|
| Channel            | 470-530         |       |  |
| Color Compensation | Off             |       |  |
| Program            | Program         | Units |  |
| Mode               | High Confidence |       |  |

|             |             |
|-------------|-------------|
| Subset Name | All Samples |
|-------------|-------------|

## Results

| Inc                                 | Pos | Name  | Type    | CP    | Concentration | Standard | Status |
|-------------------------------------|-----|-------|---------|-------|---------------|----------|--------|
| <input checked="" type="checkbox"/> | A1  | M47   | Unknown | 24.06 |               |          |        |
| <input checked="" type="checkbox"/> | A2  | M47   | Unknown | 24.03 |               |          |        |
| <input checked="" type="checkbox"/> | A3  | M48   | Unknown | 22.94 |               |          |        |
| <input checked="" type="checkbox"/> | A4  | M48   | Unknown | 22.78 |               |          |        |
| <input checked="" type="checkbox"/> | A5  | M49   | Unknown | 23.04 |               |          |        |
| <input checked="" type="checkbox"/> | A6  | M49   | Unknown | 23.04 |               |          |        |
| <input checked="" type="checkbox"/> | A7  | M50   | Unknown | 24.46 |               |          |        |
| <input checked="" type="checkbox"/> | A8  | M50   | Unknown | 24.95 |               |          |        |
| <input checked="" type="checkbox"/> | B1  | M135J | Unknown | 23.02 |               |          |        |
| <input checked="" type="checkbox"/> | B2  | M135J | Unknown | 22.99 |               |          |        |
| <input checked="" type="checkbox"/> | B3  | M136  | Unknown | 24.78 |               |          |        |
| <input checked="" type="checkbox"/> | B4  | M136  | Unknown | 24.98 |               |          |        |
| <input checked="" type="checkbox"/> | B5  | M137  | Unknown | 23.16 |               |          |        |
| <input checked="" type="checkbox"/> | B6  | M137  | Unknown | 23.18 |               |          |        |
| <input checked="" type="checkbox"/> | B7  | M138  | Unknown | 24.45 |               |          |        |
| <input checked="" type="checkbox"/> | B8  | M138  | Unknown | 24.48 |               |          |        |
| <input checked="" type="checkbox"/> | C1  | M139  | Unknown | 25.53 |               |          |        |
| <input checked="" type="checkbox"/> | C2  | M139  | Unknown | 25.60 |               |          |        |
| <input checked="" type="checkbox"/> | C3  | M140  | Unknown | 27.13 |               |          |        |
| <input checked="" type="checkbox"/> | C4  | M140  | Unknown | 27.15 |               |          |        |
| <input checked="" type="checkbox"/> | C5  | M141  | Unknown | 24.68 |               |          |        |
| <input checked="" type="checkbox"/> | C6  | M141  | Unknown | 24.68 |               |          |        |
| <input checked="" type="checkbox"/> | C7  | M142  | Unknown | 25.91 |               |          |        |
| <input checked="" type="checkbox"/> | C8  | M142  | Unknown | 25.94 |               |          |        |
| <input checked="" type="checkbox"/> | D1  | M143  | Unknown | 24.46 |               |          |        |
| <input checked="" type="checkbox"/> | D2  | M143  | Unknown | 24.53 |               |          |        |
| <input checked="" type="checkbox"/> | D3  | M144  | Unknown | 24.91 |               |          |        |
| <input checked="" type="checkbox"/> | D4  | M144  | Unknown | 24.91 |               |          |        |
| <input checked="" type="checkbox"/> | D5  | M88   | Unknown | 25.04 |               |          |        |
| <input checked="" type="checkbox"/> | D6  | M88   | Unknown | 25.04 |               |          |        |



## Results

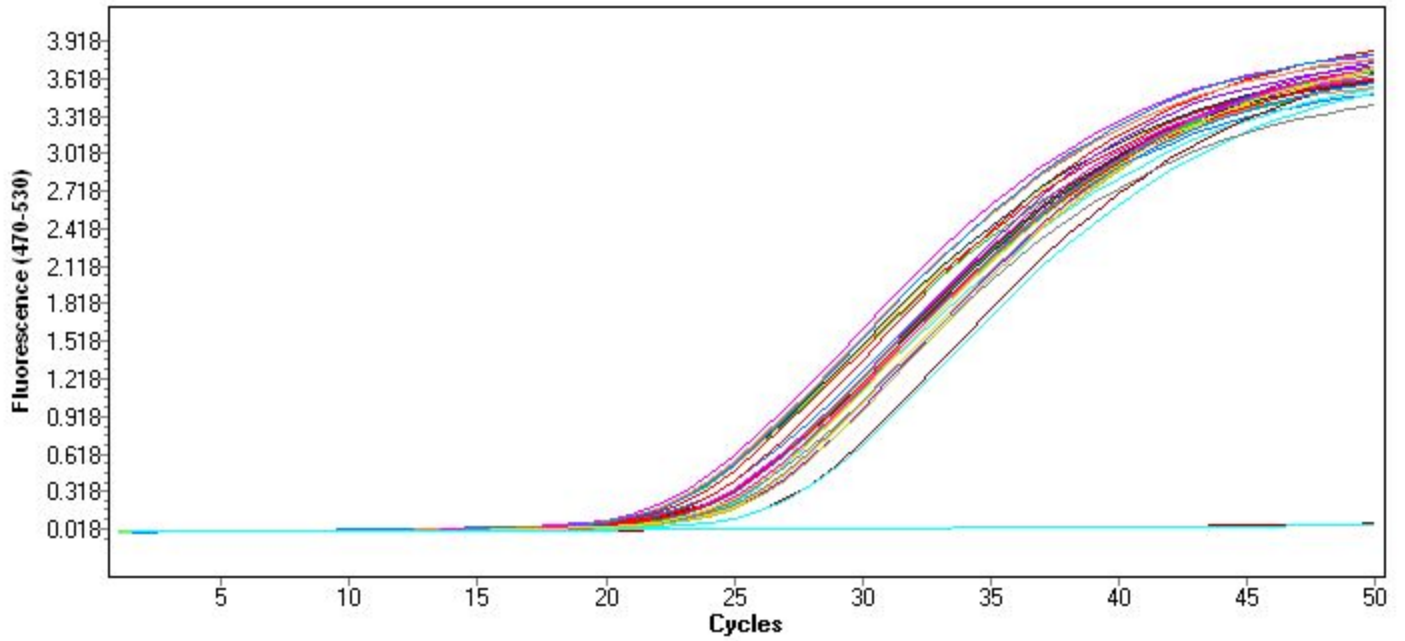
| Inc                                 | Pos | Name   | Type    | CP | Concentration | Standard | Status |
|-------------------------------------|-----|--------|---------|----|---------------|----------|--------|
| <input checked="" type="checkbox"/> | D7  | NEG RT | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | D8  | NTC    | Unknown |    |               |          |        |

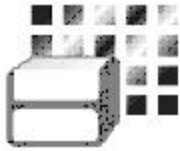
## Statistics

| Samples | Mean Cp | Std Cp | Mean conc | Std conc |
|---------|---------|--------|-----------|----------|
| A1, A2  | 24.05   | 0.02   |           |          |
| A3, A4  | 22.86   | 0.12   |           |          |
| A5, A6  | 23.04   | 0.00   |           |          |
| A7, A8  | 24.71   | 0.35   |           |          |
| B1, B2  | 23.01   | 0.02   |           |          |
| B3, B4  | 24.88   | 0.14   |           |          |
| B5, B6  | 23.17   | 0.02   |           |          |
| B7, B8  | 24.46   | 0.02   |           |          |
| C1, C2  | 25.57   | 0.05   |           |          |
| C3, C4  | 27.14   | 0.02   |           |          |
| C5, C6  | 24.68   | 0.00   |           |          |
| C7, C8  | 25.93   | 0.02   |           |          |
| D1, D2  | 24.49   | 0.05   |           |          |
| D3, D4  | 24.91   | 0.00   |           |          |
| D5, D6  | 25.04   | 0.00   |           |          |

### Amplification Curves

|           |           |          |          |          |          |            |          |
|-----------|-----------|----------|----------|----------|----------|------------|----------|
| A1: M47   | A2: M47   | A3: M48  | A4: M48  | A5: M49  | A6: M49  | A7: M50    | A8: M50  |
| B1: M135J | B2: M135J | B3: M136 | B4: M136 | B5: M137 | B6: M137 | B7: M138   | B8: M138 |
| C1: M139  | C2: M139  | C3: M140 | C4: M140 | C5: M141 | C6: M141 | C7: M142   | C8: M142 |
| D1: M143  | D2: M143  | D3: M144 | D4: M144 | D5: M88  | D6: M88  | D7: NEG RT | D8: NTC  |





**070715 16 5P 106A ALTO PESO**

**Experiment**

|               |                           |                    |   |
|---------------|---------------------------|--------------------|---|
| Creation Date | 18/04/2020 04:53:10 p. m. | Last Modified Date | 18/04/2020 05:03:22 p. m.               |
| Operator      | System Admin              | Owner              | System Admin                            |
| Start Time    | 07/07/2015 11:19:22 a. m. | End Time           | 07/07/2015 12:36:18 p. m.               |
| Run State     | Completed                 | Software Version   | LCS480 1.5.0.39 (Converted from LCS4 4. |
| Macro         |                           | Macro Owner        |   |
| Macro Status  |                           |                    |   |
| Templates     | 04FEB14_PATY Run Protocol | Plate ID           |   |
| Test ID       |                           | Lot ID             |   |
| Color Comp ID |                           |                    |   |
| Run Notes     |                           |                    |   |

**Programs**

| Program Name | Program          |                 |                  |                       |                 |                |                     |
|--------------|------------------|-----------------|------------------|-----------------------|-----------------|----------------|---------------------|
| Cycles       | 1                | Analysis Mode   | None             |                       |                 |                |                     |
| Target (°C)  | Acquisition Mode | Hold (hh:mm:ss) | Ramp Rate (°C/s) | Acquisitions (per °C) | Sec Target (°C) | Step size (°C) | Step Delay (cycles) |
| 95           | None             | 00:10:00        | 20.00            |                       | 0               | 0              | 0                   |

| Program Name | Program          |                 |                  |                       |                 |                |                     |
|--------------|------------------|-----------------|------------------|-----------------------|-----------------|----------------|---------------------|
| Cycles       | 50               | Analysis Mode   | Quantification   |                       |                 |                |                     |
| Target (°C)  | Acquisition Mode | Hold (hh:mm:ss) | Ramp Rate (°C/s) | Acquisitions (per °C) | Sec Target (°C) | Step size (°C) | Step Delay (cycles) |
| 95           | None             | 00:00:10        | 20.00            |                       | 0               | 0              | 0                   |
| 60           | None             | 00:00:30        | 20.00            |                       | 0               | 0              | 0                   |
| 72           | Single           | 00:00:01        | 20.00            |                       | 0               | 0              | 0                   |

| Program Name | Program          |                 |                  |                       |                 |                |                     |
|--------------|------------------|-----------------|------------------|-----------------------|-----------------|----------------|---------------------|
| Cycles       | 1                | Analysis Mode   | None             |                       |                 |                |                     |
| Target (°C)  | Acquisition Mode | Hold (hh:mm:ss) | Ramp Rate (°C/s) | Acquisitions (per °C) | Sec Target (°C) | Step size (°C) | Step Delay (cycles) |
| 40           | None             | 00:10:00        | 20.00            |                       | 0               | 0              | 0                   |

**Samples**

| Sample Count | 32          |    |          |              |
|--------------|-------------|----|----------|--------------|
| Subset       | All Samples |    |          |              |
| Pos          | Name        | ID | Repl. Of | Sample Notes |
| A1           | 16 5P 88    |    | A1       |              |
| A2           | 16 5P 88    |    | A1       |              |

**Samples**

| Sample Count | 32           |    |          |              |
|--------------|--------------|----|----------|--------------|
| Subset       | All Samples  |    |          |              |
| Pos          | Name         | ID | Repl. Of | Sample Notes |
| A3           | 16 5P 89     |    | A3       |              |
| A4           | 16 5P 89     |    | A3       |              |
| A5           | 16 5P 90     |    | A5       |              |
| A6           | 16 5P 90     |    | A5       |              |
| A7           | 16 5P 145    |    | A7       |              |
| A8           | 16 5P 145    |    | A7       |              |
| B1           | 16 5P 146    |    | B1       |              |
| B2           | 16 5P 146    |    | B1       |              |
| B3           | 16 5P 147    |    | B3       |              |
| B4           | 16 5P 147    |    | B3       |              |
| B5           | 16 5P 148    |    | B5       |              |
| B6           | 16 5P 148    |    | B5       |              |
| B7           | 16 5P 149    |    | B7       |              |
| B8           | 16 5P 149    |    | B7       |              |
| C1           | 16 5P 150    |    | C1       |              |
| C2           | 16 5P 150    |    | C1       |              |
| C3           | 16 5P 151    |    | C3       |              |
| C4           | 16 5P 151    |    | C3       |              |
| C5           | 16 5P NEG RT |    |          |              |
| C6           | 16 5P NTC    |    |          |              |
| C7           | 106A 88      |    | C7       |              |
| C8           | 106A 88      |    | C7       |              |
| D1           | 106A 89      |    | D1       |              |
| D2           | 106A 89      |    | D1       |              |
| D3           | 106A 90      |    | D3       |              |
| D4           | 106A 90      |    | D3       |              |
| D5           | 106A 145     |    | D5       |              |
| D6           | 106A 145     |    | D5       |              |
| D7           | 106A 146     |    | D7       |              |
| D8           | 106A 146     |    | D7       |              |

**Revision History**

| Revision | Date | User | Reason |
|----------|------|------|--------|
|          |      |      |        |

**Abs Quant/2nd Derivative Max for All Samples (Abs Quant/2nd Derivative Max)**

**Settings**

|                    |                 |       |  |
|--------------------|-----------------|-------|--|
| Channel            | 470-530         |       |  |
| Color Compensation | Off             |       |  |
| Program            | Program         | Units |  |
| Mode               | High Confidence |       |  |

|             |             |
|-------------|-------------|
| Subset Name | All Samples |
|-------------|-------------|

**Results**

| Inc                                 | Pos | Name         | Type    | CP    | Concentration | Standard | Status |
|-------------------------------------|-----|--------------|---------|-------|---------------|----------|--------|
| <input checked="" type="checkbox"/> | A1  | 16 5P 88     | Unknown | 26.72 |               |          |        |
| <input checked="" type="checkbox"/> | A2  | 16 5P 88     | Unknown | 26.61 |               |          |        |
| <input checked="" type="checkbox"/> | A3  | 16 5P 89     | Unknown | 26.24 |               |          |        |
| <input checked="" type="checkbox"/> | A4  | 16 5P 89     | Unknown | 26.31 |               |          |        |
| <input checked="" type="checkbox"/> | A5  | 16 5P 90     | Unknown | 26.57 |               |          |        |
| <input checked="" type="checkbox"/> | A6  | 16 5P 90     | Unknown | 26.48 |               |          |        |
| <input checked="" type="checkbox"/> | A7  | 16 5P 145    | Unknown | 26.07 |               |          |        |
| <input checked="" type="checkbox"/> | A8  | 16 5P 145    | Unknown | 26.14 |               |          |        |
| <input checked="" type="checkbox"/> | B1  | 16 5P 146    | Unknown | 24.73 |               |          |        |
| <input checked="" type="checkbox"/> | B2  | 16 5P 146    | Unknown | 24.69 |               |          |        |
| <input checked="" type="checkbox"/> | B3  | 16 5P 147    | Unknown | 25.63 |               |          |        |
| <input checked="" type="checkbox"/> | B4  | 16 5P 147    | Unknown | 25.60 |               |          |        |
| <input checked="" type="checkbox"/> | B5  | 16 5P 148    | Unknown | 25.71 |               |          |        |
| <input checked="" type="checkbox"/> | B6  | 16 5P 148    | Unknown | 25.85 |               |          |        |
| <input checked="" type="checkbox"/> | B7  | 16 5P 149    | Unknown | 25.07 |               |          |        |
| <input checked="" type="checkbox"/> | B8  | 16 5P 149    | Unknown | 25.05 |               |          |        |
| <input checked="" type="checkbox"/> | C1  | 16 5P 150    | Unknown | 25.66 |               |          |        |
| <input checked="" type="checkbox"/> | C2  | 16 5P 150    | Unknown | 25.71 |               |          |        |
| <input checked="" type="checkbox"/> | C3  | 16 5P 151    | Unknown | 25.41 |               |          |        |
| <input checked="" type="checkbox"/> | C4  | 16 5P 151    | Unknown | 25.38 |               |          |        |
| <input checked="" type="checkbox"/> | C5  | 16 5P NEG RT | Unknown |       |               |          |        |
| <input checked="" type="checkbox"/> | C6  | 16 5P NTC    | Unknown |       |               |          |        |
| <input checked="" type="checkbox"/> | C7  | 106A 88      | Unknown | 32.22 |               |          |        |
| <input checked="" type="checkbox"/> | C8  | 106A 88      | Unknown | 32.22 |               |          |        |
| <input checked="" type="checkbox"/> | D1  | 106A 89      | Unknown | 31.61 |               |          |        |
| <input checked="" type="checkbox"/> | D2  | 106A 89      | Unknown | 31.59 |               |          |        |
| <input checked="" type="checkbox"/> | D3  | 106A 90      | Unknown | 33.69 |               |          |        |
| <input checked="" type="checkbox"/> | D4  | 106A 90      | Unknown | 33.57 |               |          |        |
| <input checked="" type="checkbox"/> | D5  | 106A 145     | Unknown | 32.55 |               |          |        |
| <input checked="" type="checkbox"/> | D6  | 106A 145     | Unknown | 32.63 |               |          |        |

## Results

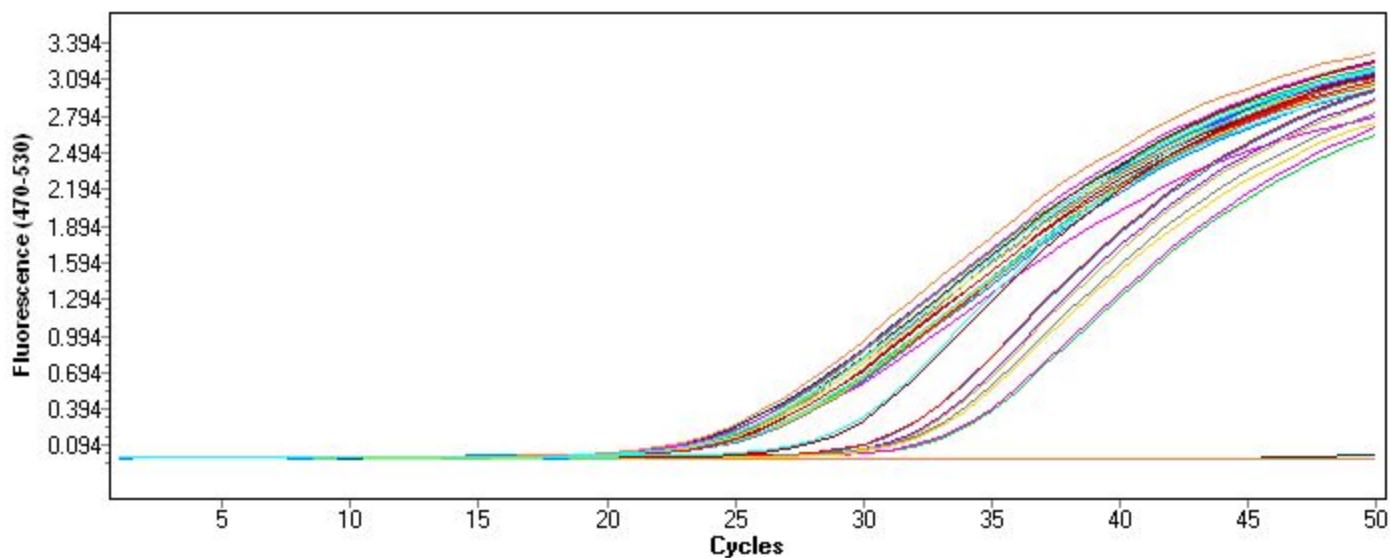
| Inc                                 | Pos | Name     | Type    | CP    | Concentration | Standard | Status |
|-------------------------------------|-----|----------|---------|-------|---------------|----------|--------|
| <input checked="" type="checkbox"/> | D7  | 106A 146 | Unknown | 29.51 |               |          |        |
| <input checked="" type="checkbox"/> | D8  | 106A 146 | Unknown | 29.48 |               |          |        |

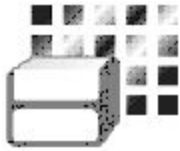
## Statistics

| Samples | Mean Cp | Std Cp | Mean conc | Std conc |
|---------|---------|--------|-----------|----------|
| A1, A2  | 26.67   | 0.07   |           |          |
| A3, A4  | 26.27   | 0.05   |           |          |
| A5, A6  | 26.53   | 0.06   |           |          |
| A7, A8  | 26.11   | 0.05   |           |          |
| B1, B2  | 24.71   | 0.03   |           |          |
| B3, B4  | 25.62   | 0.02   |           |          |
| B5, B6  | 25.78   | 0.10   |           |          |
| B7, B8  | 25.06   | 0.01   |           |          |
| C1, C2  | 25.68   | 0.04   |           |          |
| C3, C4  | 25.40   | 0.02   |           |          |
| C7, C8  | 32.22   | 0.00   |           |          |
| D1, D2  | 31.60   | 0.01   |           |          |
| D3, D4  | 33.63   | 0.08   |           |          |
| D5, D6  | 32.59   | 0.06   |           |          |
| D7, D8  | 29.49   | 0.02   |           |          |

### Amplification Curves

|                  |               |               |               |               |
|------------------|---------------|---------------|---------------|---------------|
| A1: 16 5P 88     | A2: 16 5P 88  | A3: 16 5P 89  | A4: 16 5P 89  | A5: 16 5P 90  |
| A6: 16 5P 90     | A7: 16 5P 145 | A8: 16 5P 145 | B1: 16 5P 146 | B2: 16 5P 146 |
| B3: 16 5P 147    | B4: 16 5P 147 | B5: 16 5P 148 | B6: 16 5P 148 | B7: 16 5P 149 |
| B8: 16 5P 149    | C1: 16 5P 150 | C2: 16 5P 150 | C3: 16 5P 151 | C4: 16 5P 151 |
| C5: 16 5P NEG RT | C6: 16 5P NTC | C7: 106A 88   | C8: 106A 88   | D1: 106A 89   |
| D2: 106A 89      | D3: 106A 90   | D4: 106A 90   | D5: 106A 145  | D6: 106A 145  |
| D7: 106A 146     | D8: 106A 146  |               |               |               |





070715 106A ALTO PESO b

Experiment

|               |                           |                    |   |
|---------------|---------------------------|--------------------|---|
| Creation Date | 18/04/2020 04:53:12 p. m. | Last Modified Date | 18/04/2020 05:04:59 p. m.               |
| Operator      | System Admin              | Owner              | System Admin                            |
| Start Time    | 07/07/2015 12:40:39 p. m. | End Time           | 07/07/2015 01:52:34 p. m.               |
| Run State     | Completed                 | Software Version   | LCS480 1.5.0.39 (Converted from LCS4 4. |
| Macro         |                           | Macro Owner        |   |
| Macro Status  |                           |                    |   |
| Templates     | 04FEB14_PATY Run Protocol | Plate ID           |   |
| Test ID       |                           | Lot ID             |   |
| Color Comp ID |                           |                    |   |
| Run Notes     |                           |                    |   |

Programs

| Program Name | Program          |                 |                  |                       |                 |                |                     |
|--------------|------------------|-----------------|------------------|-----------------------|-----------------|----------------|---------------------|
| Cycles       | 1                | Analysis Mode   | None             |                       |                 |                |                     |
| Target (°C)  | Acquisition Mode | Hold (hh:mm:ss) | Ramp Rate (°C/s) | Acquisitions (per °C) | Sec Target (°C) | Step size (°C) | Step Delay (cycles) |
| 95           | None             | 00:10:00        | 20.00            |                       | 0               | 0              | 0                   |

| Program Name | Program          |                 |                  |                       |                 |                |                     |
|--------------|------------------|-----------------|------------------|-----------------------|-----------------|----------------|---------------------|
| Cycles       | 50               | Analysis Mode   | Quantification   |                       |                 |                |                     |
| Target (°C)  | Acquisition Mode | Hold (hh:mm:ss) | Ramp Rate (°C/s) | Acquisitions (per °C) | Sec Target (°C) | Step size (°C) | Step Delay (cycles) |
| 95           | None             | 00:00:10        | 20.00            |                       | 0               | 0              | 0                   |
| 60           | None             | 00:00:30        | 20.00            |                       | 0               | 0              | 0                   |
| 72           | Single           | 00:00:01        | 20.00            |                       | 0               | 0              | 0                   |

| Program Name | Program          |                 |                  |                       |                 |                |                     |
|--------------|------------------|-----------------|------------------|-----------------------|-----------------|----------------|---------------------|
| Cycles       | 1                | Analysis Mode   | None             |                       |                 |                |                     |
| Target (°C)  | Acquisition Mode | Hold (hh:mm:ss) | Ramp Rate (°C/s) | Acquisitions (per °C) | Sec Target (°C) | Step size (°C) | Step Delay (cycles) |
| 40           | None             | 00:10:00        | 20.00            |                       | 0               | 0              | 0                   |

Samples

| Sample Count | 14          |    |          |              |
|--------------|-------------|----|----------|--------------|
| Subset       | All Samples |    |          |              |
| Pos          | Name        | ID | Repl. Of | Sample Notes |
| A1           | 106a M147   |    | A1       |              |
| A2           | 106a M147   |    | A1       |              |



## Samples

| Sample Count | 14           |    |          |              |
|--------------|--------------|----|----------|--------------|
| Subset       | All Samples  |    |          |              |
| Pos          | Name         | ID | Repl. Of | Sample Notes |
| A3           | 106A M148    |    | A3       |              |
| A4           | 106A M148    |    | A3       |              |
| A5           | 106A M149    |    | A5       |              |
| A6           | 106A M149    |    | A5       |              |
| A7           | 106A M150    |    | A7       |              |
| A8           | 106A M150    |    | A7       |              |
| B1           | 106A M151    |    | B1       |              |
| B2           | 106A M151    |    | B1       |              |
| B3           | 106A M50 LBW |    | B3       |              |
| B4           | 106A M50 LBW |    | B3       |              |
| B5           | 106A NEG RT  |    |          |              |
| B6           | 106A NTC     |    |          |              |

## Revision History

| Revision | Date | User | Reason |
|----------|------|------|--------|
|          |      |      |        |

## Abs Quant/2nd Derivative Max for All Samples (Abs Quant/2nd Derivative Max)

### Settings

|                    |                 |       |  |
|--------------------|-----------------|-------|--|
| Channel            | 470-530         |       |  |
| Color Compensation | Off             |       |  |
| Program            | Program         | Units |  |
| Mode               | High Confidence |       |  |

|             |             |
|-------------|-------------|
| Subset Name | All Samples |
|-------------|-------------|

## Results

| Inc                                 | Pos | Name      | Type    | CP    | Concentration | Standard | Status |
|-------------------------------------|-----|-----------|---------|-------|---------------|----------|--------|
| <input checked="" type="checkbox"/> | A1  | 106a M147 | Unknown | 32.39 |               |          |        |
| <input checked="" type="checkbox"/> | A2  | 106a M147 | Unknown | 32.28 |               |          |        |
| <input checked="" type="checkbox"/> | A3  | 106A M148 | Unknown | 32.80 |               |          |        |
| <input checked="" type="checkbox"/> | A4  | 106A M148 | Unknown | 32.74 |               |          |        |
| <input checked="" type="checkbox"/> | A5  | 106A M149 | Unknown | 32.00 |               |          |        |
| <input checked="" type="checkbox"/> | A6  | 106A M149 | Unknown | 32.02 |               |          |        |
| <input checked="" type="checkbox"/> | A7  | 106A M150 | Unknown | 32.32 |               |          |        |
| <input checked="" type="checkbox"/> | A8  | 106A M150 | Unknown | 32.49 |               |          |        |
| <input checked="" type="checkbox"/> | B1  | 106A M151 | Unknown | 32.11 |               |          |        |

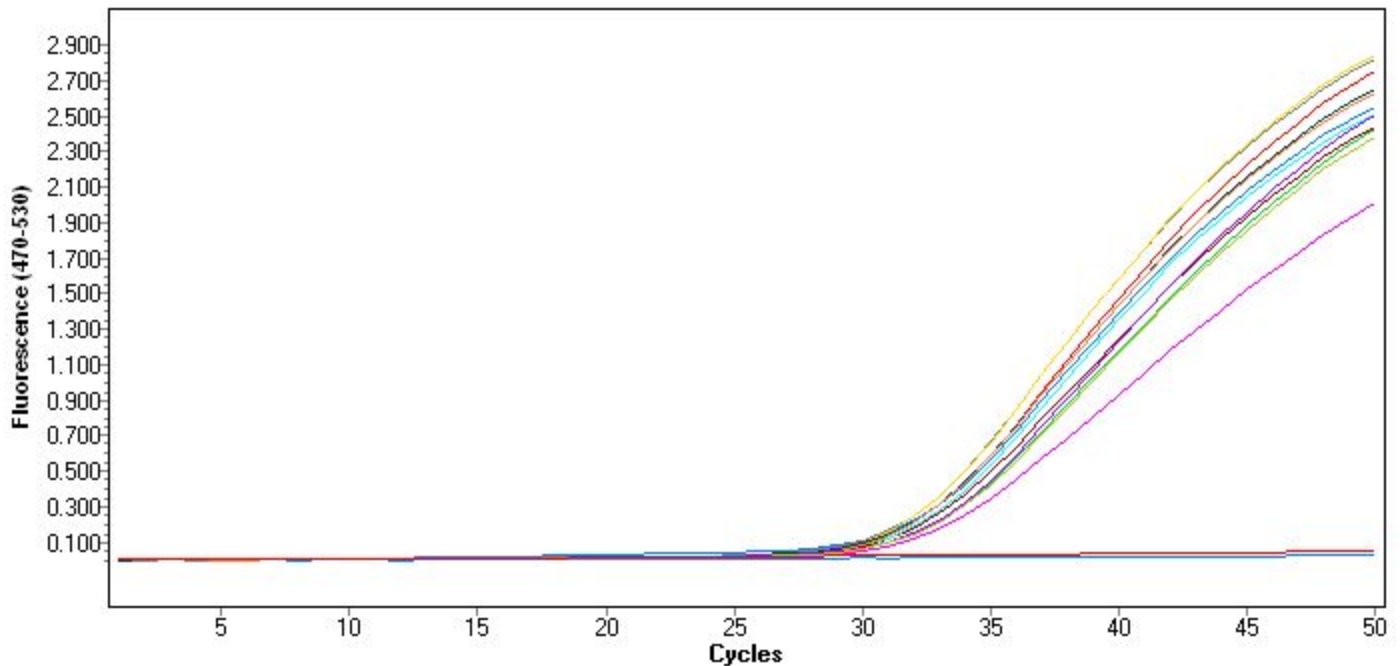
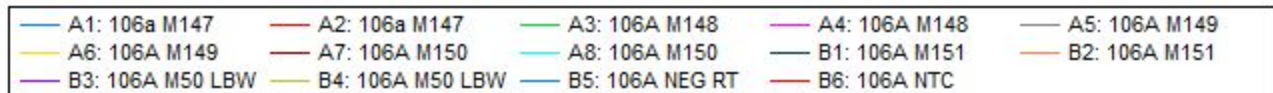
## Results

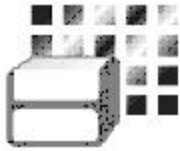
| Inc                                 | Pos | Name         | Type    | CP    | Concentration | Standard | Status |
|-------------------------------------|-----|--------------|---------|-------|---------------|----------|--------|
| <input checked="" type="checkbox"/> | B2  | 106A M151    | Unknown | 32.12 |               |          |        |
| <input checked="" type="checkbox"/> | B3  | 106A M50 LBW | Unknown | 32.91 |               |          |        |
| <input checked="" type="checkbox"/> | B4  | 106A M50 LBW | Unknown | 32.87 |               |          |        |
| <input checked="" type="checkbox"/> | B5  | 106A NEG RT  | Unknown |       |               |          |        |
| <input checked="" type="checkbox"/> | B6  | 106A NTC     | Unknown |       |               |          |        |

## Statistics

| Samples | Mean Cp | Std Cp | Mean conc | Std conc |
|---------|---------|--------|-----------|----------|
| A1, A2  | 32.34   | 0.08   |           |          |
| A3, A4  | 32.77   | 0.04   |           |          |
| A5, A6  | 32.01   | 0.02   |           |          |
| A7, A8  | 32.40   | 0.12   |           |          |
| B1, B2  | 32.12   | 0.01   |           |          |
| B3, B4  | 32.89   | 0.03   |           |          |

### Amplification Curves





011015 MIR 126 3P NBW MACRO a

Experiment

|               |                           |                    |   |
|---------------|---------------------------|--------------------|---|
| Creation Date | 18/04/2020 04:53:03 p. m. | Last Modified Date | 18/04/2020 04:59:37 p. m.               |
| Operator      | System Admin              | Owner              | System Admin                            |
| Start Time    | 01/10/2015 01:02:13 p. m. | End Time           | 01/10/2015 02:43:13 p. m.               |
| Run State     | Completed                 | Software Version   | LCS480 1.5.0.39 (Converted from LCS4 4. |
| Macro         |                           | Macro Owner        |   |
| Macro Status  |                           |                    |   |
| Templates     | 04FEB14_PATY Run Protocol | Plate ID           |   |
| Test ID       |                           | Lot ID             |   |
| Color Comp ID |                           |                    |   |
| Run Notes     |                           |                    |   |

Programs

| Program Name | Program          |                 |                  |                       |                 |                |                     |
|--------------|------------------|-----------------|------------------|-----------------------|-----------------|----------------|---------------------|
| Cycles       | 1                | Analysis Mode   | None             |                       |                 |                |                     |
| Target (°C)  | Acquisition Mode | Hold (hh:mm:ss) | Ramp Rate (°C/s) | Acquisitions (per °C) | Sec Target (°C) | Step size (°C) | Step Delay (cycles) |
| 95           | None             | 00:10:00        | 20.00            |                       | 0               | 0              | 0                   |

| Program Name | Program          |                 |                  |                       |                 |                |                     |
|--------------|------------------|-----------------|------------------|-----------------------|-----------------|----------------|---------------------|
| Cycles       | 50               | Analysis Mode   | Quantification   |                       |                 |                |                     |
| Target (°C)  | Acquisition Mode | Hold (hh:mm:ss) | Ramp Rate (°C/s) | Acquisitions (per °C) | Sec Target (°C) | Step size (°C) | Step Delay (cycles) |
| 95           | None             | 00:00:10        | 20.00            |                       | 0               | 0              | 0                   |
| 60           | None             | 00:00:30        | 20.00            |                       | 0               | 0              | 0                   |
| 72           | Single           | 00:00:30        | 20.00            |                       | 0               | 0              | 0                   |

| Program Name | Program          |                 |                  |                       |                 |                |                     |
|--------------|------------------|-----------------|------------------|-----------------------|-----------------|----------------|---------------------|
| Cycles       | 1                | Analysis Mode   | None             |                       |                 |                |                     |
| Target (°C)  | Acquisition Mode | Hold (hh:mm:ss) | Ramp Rate (°C/s) | Acquisitions (per °C) | Sec Target (°C) | Step size (°C) | Step Delay (cycles) |
| 40           | None             | 00:10:00        | 20.00            |                       | 0               | 0              | 0                   |

Samples

| Sample Count | 32          |    |          |              |
|--------------|-------------|----|----------|--------------|
| Subset       | All Samples |    |          |              |
| Pos          | Name        | ID | Repl. Of | Sample Notes |
| A1           | M11         |    | A1       |              |
| A2           | M11         |    | A1       |              |

**Samples**

| Sample Count | 32          |    |          |              |
|--------------|-------------|----|----------|--------------|
| Subset       | All Samples |    |          |              |
| Pos          | Name        | ID | Repl. Of | Sample Notes |
| A3           | M12         |    | A3       |              |
| A4           | M12         |    | A3       |              |
| A5           | M13         |    | A5       |              |
| A6           | M13         |    | A5       |              |
| A7           | M14         |    | A7       |              |
| A8           | M14         |    | A7       |              |
| B1           | M15         |    | B1       |              |
| B2           | M15         |    | B1       |              |
| B3           | M16         |    | B3       |              |
| B4           | M16         |    | B3       |              |
| B5           | M17         |    | B5       |              |
| B6           | M17         |    | B5       |              |
| B7           | M18         |    | B7       |              |
| B8           | M18         |    | B7       |              |
| C1           | M19         |    | C1       |              |
| C2           | M19         |    | C1       |              |
| C3           | M20         |    | C3       |              |
| C4           | M20         |    | C3       |              |
| C5           | M135        |    | C5       |              |
| C6           | M135        |    | C5       |              |
| C7           | M136        |    | C7       |              |
| C8           | M136        |    | C7       |              |
| D1           | M137        |    | D1       |              |
| D2           | M137        |    | D1       |              |
| D3           | M138        |    | D3       |              |
| D4           | M138        |    | D3       |              |
| D5           | M139        |    | D5       |              |
| D6           | M139        |    | D5       |              |
| D7           | NEG RT      |    |          |              |
| D8           | NTC         |    |          |              |

**Revision History**

| Revision | Date | User | Reason |
|----------|------|------|--------|
|          |      |      |        |

**Abs Quant/2nd Derivative Max for All Samples (Abs Quant/2nd Derivative Max)**

## Settings

|                    |                 |       |  |
|--------------------|-----------------|-------|--|
| Channel            | 470-530         |       |  |
| Color Compensation | Off             |       |  |
| Program            | Program         | Units |  |
| Mode               | High Confidence |       |  |

|             |             |
|-------------|-------------|
| Subset Name | All Samples |
|-------------|-------------|

## Results

| Inc                                 | Pos | Name | Type    | CP    | Concentration | Standard | Status |
|-------------------------------------|-----|------|---------|-------|---------------|----------|--------|
| <input checked="" type="checkbox"/> | A1  | M11  | Unknown | 32.87 |               |          |        |
| <input checked="" type="checkbox"/> | A2  | M11  | Unknown | 32.83 |               |          |        |
| <input checked="" type="checkbox"/> | A3  | M12  | Unknown | 33.28 |               |          |        |
| <input checked="" type="checkbox"/> | A4  | M12  | Unknown | 33.40 |               |          |        |
| <input checked="" type="checkbox"/> | A5  | M13  | Unknown | 32.73 |               |          |        |
| <input checked="" type="checkbox"/> | A6  | M13  | Unknown | 32.61 |               |          |        |
| <input checked="" type="checkbox"/> | A7  | M14  | Unknown | 32.83 |               |          |        |
| <input checked="" type="checkbox"/> | A8  | M14  | Unknown | 32.84 |               |          |        |
| <input checked="" type="checkbox"/> | B1  | M15  | Unknown | 32.59 |               |          |        |
| <input checked="" type="checkbox"/> | B2  | M15  | Unknown | 32.65 |               |          |        |
| <input checked="" type="checkbox"/> | B3  | M16  | Unknown | 32.54 |               |          |        |
| <input checked="" type="checkbox"/> | B4  | M16  | Unknown | 32.78 |               |          |        |
| <input checked="" type="checkbox"/> | B5  | M17  | Unknown | 33.81 |               |          |        |
| <input checked="" type="checkbox"/> | B6  | M17  | Unknown | 33.93 |               |          |        |
| <input checked="" type="checkbox"/> | B7  | M18  | Unknown | 33.13 |               |          |        |
| <input checked="" type="checkbox"/> | B8  | M18  | Unknown | 33.20 |               |          |        |
| <input checked="" type="checkbox"/> | C1  | M19  | Unknown | 32.34 |               |          |        |
| <input checked="" type="checkbox"/> | C2  | M19  | Unknown | 32.21 |               |          |        |
| <input checked="" type="checkbox"/> | C3  | M20  | Unknown | 32.58 |               |          |        |
| <input checked="" type="checkbox"/> | C4  | M20  | Unknown | 32.49 |               |          |        |
| <input checked="" type="checkbox"/> | C5  | M135 | Unknown | 31.51 |               |          |        |
| <input checked="" type="checkbox"/> | C6  | M135 | Unknown | 31.57 |               |          |        |
| <input checked="" type="checkbox"/> | C7  | M136 | Unknown | 33.18 |               |          |        |
| <input checked="" type="checkbox"/> | C8  | M136 | Unknown | 33.04 |               |          |        |
| <input checked="" type="checkbox"/> | D1  | M137 | Unknown | 35.19 |               |          |        |
| <input checked="" type="checkbox"/> | D2  | M137 | Unknown | 34.87 |               |          |        |
| <input checked="" type="checkbox"/> | D3  | M138 | Unknown | 32.61 |               |          |        |
| <input checked="" type="checkbox"/> | D4  | M138 | Unknown | 32.58 |               |          |        |
| <input checked="" type="checkbox"/> | D5  | M139 | Unknown | 32.71 |               |          |        |
| <input checked="" type="checkbox"/> | D6  | M139 | Unknown | 32.70 |               |          |        |

---

**Results**

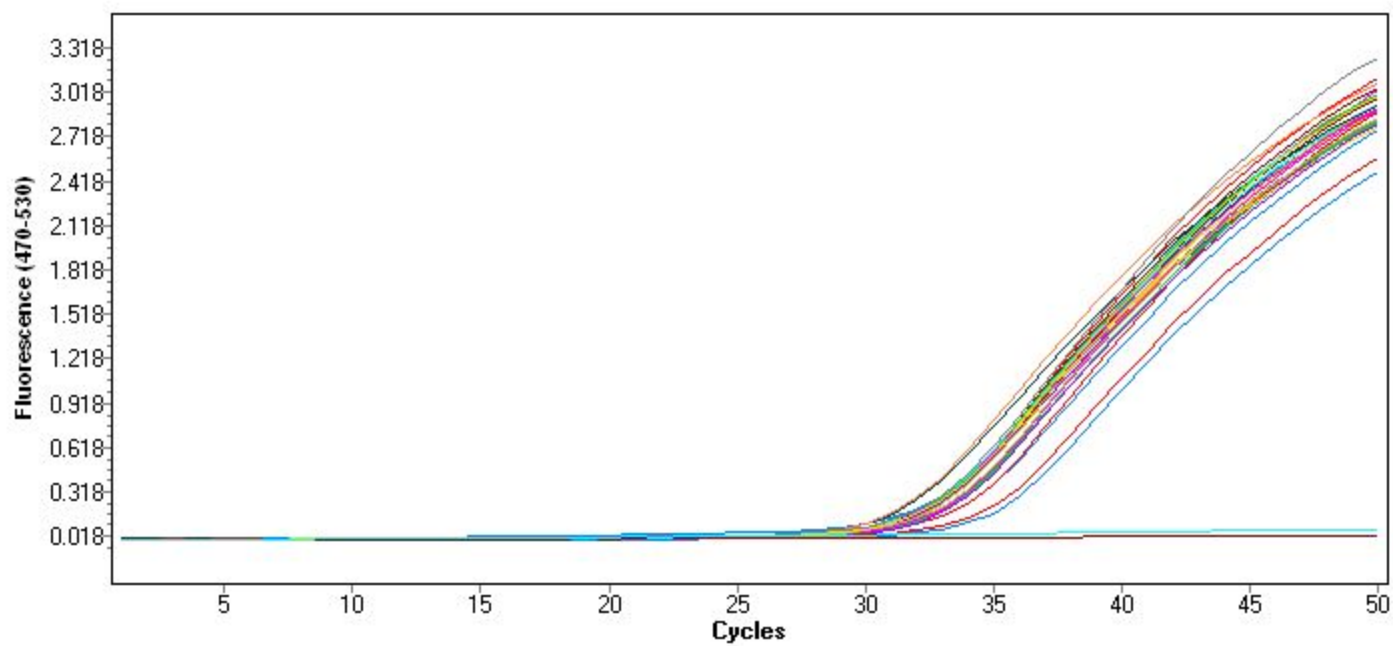
| Inc                                 | Pos | Name   | Type    | CP | Concentration | Standard | Status |
|-------------------------------------|-----|--------|---------|----|---------------|----------|--------|
| <input checked="" type="checkbox"/> | D7  | NEG RT | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | D8  | NTC    | Unknown |    |               |          |        |

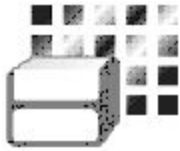
**Statistics**

| Samples | Mean Cp | Std Cp | Mean conc | Std conc |
|---------|---------|--------|-----------|----------|
| A1, A2  | 32.85   | 0.03   |           |          |
| A3, A4  | 33.34   | 0.09   |           |          |
| A5, A6  | 32.67   | 0.08   |           |          |
| A7, A8  | 32.83   | 0.01   |           |          |
| B1, B2  | 32.62   | 0.04   |           |          |
| B3, B4  | 32.66   | 0.17   |           |          |
| B5, B6  | 33.87   | 0.09   |           |          |
| B7, B8  | 33.16   | 0.05   |           |          |
| C1, C2  | 32.28   | 0.10   |           |          |
| C3, C4  | 32.53   | 0.07   |           |          |
| C5, C6  | 31.54   | 0.05   |           |          |
| C7, C8  | 33.11   | 0.10   |           |          |
| D1, D2  | 35.03   | 0.22   |           |          |
| D3, D4  | 32.60   | 0.02   |           |          |
| D5, D6  | 32.70   | 0.00   |           |          |

### Amplification Curves

|          |          |          |          |          |          |            |          |
|----------|----------|----------|----------|----------|----------|------------|----------|
| A1: M11  | A2: M11  | A3: M12  | A4: M12  | A5: M13  | A6: M13  | A7: M14    | A8: M14  |
| B1: M15  | B2: M15  | B3: M16  | B4: M16  | B5: M17  | B6: M17  | B7: M18    | B8: M18  |
| C1: M19  | C2: M19  | C3: M20  | C4: M20  | C5: M135 | C6: M135 | C7: M136   | C8: M136 |
| D1: M137 | D2: M137 | D3: M138 | D4: M138 | D5: M139 | D6: M139 | D7: NEG RT | D8: NTC  |





081215 MIR 221 3P NBW a

Experiment

|               |                           |                    |   |
|---------------|---------------------------|--------------------|---|
| Creation Date | 18/04/2020 04:53:18 p. m. | Last Modified Date | 18/04/2020 05:07:42 p. m.               |
| Operator      | System Admin              | Owner              | System Admin                            |
| Start Time    | 08/12/2015 11:28:59 a. m. | End Time           | 08/12/2015 01:12:22 p. m.               |
| Run State     | Completed                 | Software Version   | LCS480 1.5.0.39 (Converted from LCS4 4. |
| Macro         |                           | Macro Owner        |   |
| Macro Status  |                           |                    |   |
| Templates     | 04FEB14_PATY Run Protocol | Plate ID           |   |
| Test ID       |                           | Lot ID             |   |
| Color Comp ID |                           |                    |   |
| Run Notes     |                           |                    |   |

Programs

| Program Name | Program          |                 |                  |                       |                 |                |                     |
|--------------|------------------|-----------------|------------------|-----------------------|-----------------|----------------|---------------------|
| Cycles       | 1                | Analysis Mode   | None             |                       |                 |                |                     |
| Target (°C)  | Acquisition Mode | Hold (hh:mm:ss) | Ramp Rate (°C/s) | Acquisitions (per °C) | Sec Target (°C) | Step size (°C) | Step Delay (cycles) |
| 95           | None             | 00:10:00        | 20.00            |                       | 0               | 0              | 0                   |

| Program Name | Program          |                 |                  |                       |                 |                |                     |
|--------------|------------------|-----------------|------------------|-----------------------|-----------------|----------------|---------------------|
| Cycles       | 50               | Analysis Mode   | Quantification   |                       |                 |                |                     |
| Target (°C)  | Acquisition Mode | Hold (hh:mm:ss) | Ramp Rate (°C/s) | Acquisitions (per °C) | Sec Target (°C) | Step size (°C) | Step Delay (cycles) |
| 95           | None             | 00:00:10        | 20.00            |                       | 0               | 0              | 0                   |
| 55           | None             | 00:00:30        | 20.00            |                       | 0               | 0              | 0                   |
| 72           | Single           | 00:00:30        | 20.00            |                       | 0               | 0              | 0                   |

| Program Name | Program          |                 |                  |                       |                 |                |                     |
|--------------|------------------|-----------------|------------------|-----------------------|-----------------|----------------|---------------------|
| Cycles       | 1                | Analysis Mode   | None             |                       |                 |                |                     |
| Target (°C)  | Acquisition Mode | Hold (hh:mm:ss) | Ramp Rate (°C/s) | Acquisitions (per °C) | Sec Target (°C) | Step size (°C) | Step Delay (cycles) |
| 40           | None             | 00:10:00        | 20.00            |                       | 0               | 0              | 0                   |

Samples

| Sample Count | 32          |    |          |              |  |
|--------------|-------------|----|----------|--------------|--|
| Subset       | All Samples |    |          |              |  |
| Pos          | Name        | ID | Repl. Of | Sample Notes |  |
| A1           | M1          |    | A1       |              |  |
| A2           | M1          |    | A1       |              |  |



**Samples**

| Sample Count | 32          |    |          |              |
|--------------|-------------|----|----------|--------------|
| Subset       | All Samples |    |          |              |
| Pos          | Name        | ID | Repl. Of | Sample Notes |
| A3           | M2          |    | A3       |              |
| A4           | M2          |    | A3       |              |
| A5           | M3          |    | A5       |              |
| A6           | M3          |    | A5       |              |
| A7           | M4          |    | A7       |              |
| A8           | M4          |    | A7       |              |
| B1           | M5          |    | B1       |              |
| B2           | M5          |    | B1       |              |
| B3           | M6          |    | B3       |              |
| B4           | M6          |    | B3       |              |
| B5           | M7          |    | B5       |              |
| B6           | M7          |    | B5       |              |
| B7           | M8          |    | B7       |              |
| B8           | M8          |    | B7       |              |
| C1           | M9          |    | C1       |              |
| C2           | M9          |    | C1       |              |
| C3           | M10         |    | C3       |              |
| C4           | M10         |    | C3       |              |
| C5           | M11         |    | C5       |              |
| C6           | M11         |    | C5       |              |
| C7           | M12         |    | C7       |              |
| C8           | M12         |    | C7       |              |
| D1           | M13         |    | D1       |              |
| D2           | M13         |    | D1       |              |
| D3           | M14         |    | D3       |              |
| D4           | M14         |    | D3       |              |
| D5           | M15         |    | D5       |              |
| D6           | M15         |    | D5       |              |
| D7           | NEG RT 221  |    |          |              |
| D8           | NTC 221     |    |          |              |

**Revision History**

| Revision | Date | User | Reason |
|----------|------|------|--------|
|          |      |      |        |

**Abs Quant/2nd Derivative Max for All Samples (Abs Quant/2nd Derivative Max)**

## Settings

|                    |                 |       |  |
|--------------------|-----------------|-------|--|
| Channel            | 470-530         |       |  |
| Color Compensation | Off             |       |  |
| Program            | Program         | Units |  |
| Mode               | High Confidence |       |  |

|             |             |
|-------------|-------------|
| Subset Name | All Samples |
|-------------|-------------|

## Results

| Inc                                 | Pos | Name | Type    | CP    | Concentration | Standard | Status |
|-------------------------------------|-----|------|---------|-------|---------------|----------|--------|
| <input checked="" type="checkbox"/> | A1  | M1   | Unknown | 38.07 |               |          |        |
| <input checked="" type="checkbox"/> | A2  | M1   | Unknown | 37.22 |               |          |        |
| <input checked="" type="checkbox"/> | A3  | M2   | Unknown | 40.05 |               |          |        |
| <input checked="" type="checkbox"/> | A4  | M2   | Unknown | 38.87 |               |          |        |
| <input checked="" type="checkbox"/> | A5  | M3   | Unknown | 38.66 |               |          |        |
| <input checked="" type="checkbox"/> | A6  | M3   | Unknown | 39.63 |               |          |        |
| <input checked="" type="checkbox"/> | A7  | M4   | Unknown | 38.84 |               |          |        |
| <input checked="" type="checkbox"/> | A8  | M4   | Unknown | 37.91 |               |          |        |
| <input checked="" type="checkbox"/> | B1  | M5   | Unknown | 39.02 |               |          |        |
| <input checked="" type="checkbox"/> | B2  | M5   | Unknown |       |               |          |        |
| <input checked="" type="checkbox"/> | B3  | M6   | Unknown | 39.04 |               |          |        |
| <input checked="" type="checkbox"/> | B4  | M6   | Unknown |       |               |          |        |
| <input checked="" type="checkbox"/> | B5  | M7   | Unknown | 38.13 |               |          |        |
| <input checked="" type="checkbox"/> | B6  | M7   | Unknown | 39.18 |               |          |        |
| <input checked="" type="checkbox"/> | B7  | M8   | Unknown | 41.51 |               |          |        |
| <input checked="" type="checkbox"/> | B8  | M8   | Unknown | 40.14 |               |          |        |
| <input checked="" type="checkbox"/> | C1  | M9   | Unknown | 38.24 |               |          |        |
| <input checked="" type="checkbox"/> | C2  | M9   | Unknown | 38.35 |               |          |        |
| <input checked="" type="checkbox"/> | C3  | M10  | Unknown | 39.05 |               |          |        |
| <input checked="" type="checkbox"/> | C4  | M10  | Unknown | 38.09 |               |          |        |
| <input checked="" type="checkbox"/> | C5  | M11  | Unknown | 38.67 |               |          |        |
| <input checked="" type="checkbox"/> | C6  | M11  | Unknown | 37.58 |               |          |        |
| <input checked="" type="checkbox"/> | C7  | M12  | Unknown | 37.50 |               |          |        |
| <input checked="" type="checkbox"/> | C8  | M12  | Unknown | 37.54 |               |          |        |
| <input checked="" type="checkbox"/> | D1  | M13  | Unknown | 38.78 |               |          |        |
| <input checked="" type="checkbox"/> | D2  | M13  | Unknown | 37.03 |               |          |        |
| <input checked="" type="checkbox"/> | D3  | M14  | Unknown | 39.86 |               |          |        |
| <input checked="" type="checkbox"/> | D4  | M14  | Unknown |       |               |          |        |
| <input checked="" type="checkbox"/> | D5  | M15  | Unknown | 39.38 |               |          |        |
| <input checked="" type="checkbox"/> | D6  | M15  | Unknown | 38.57 |               |          |        |

## Results

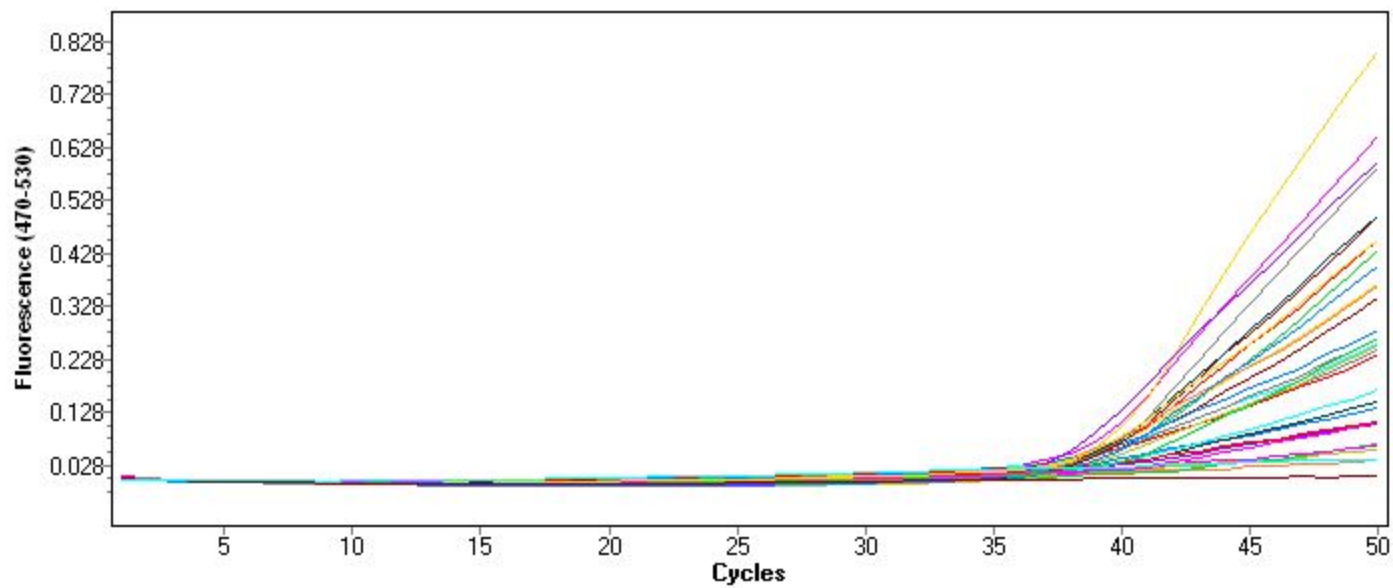
| Inc                                 | Pos | Name       | Type    | CP | Concentration | Standard | Status |
|-------------------------------------|-----|------------|---------|----|---------------|----------|--------|
| <input checked="" type="checkbox"/> | D7  | NEG RT 221 | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | D8  | NTC 221    | Unknown |    |               |          |        |

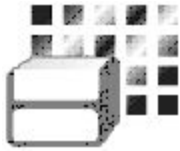
## Statistics

| Samples | Mean Cp | Std Cp | Mean conc | Std conc |
|---------|---------|--------|-----------|----------|
| A1, A2  | 37.64   | 0.60   |           |          |
| A3, A4  | 39.46   | 0.84   |           |          |
| A5, A6  | 39.14   | 0.69   |           |          |
| A7, A8  | 38.38   | 0.66   |           |          |
| B1, B2  | 39.02   |        |           |          |
| B3, B4  | 39.04   |        |           |          |
| B5, B6  | 38.66   | 0.74   |           |          |
| B7, B8  | 40.82   | 0.96   |           |          |
| C1, C2  | 38.30   | 0.08   |           |          |
| C3, C4  | 38.57   | 0.68   |           |          |
| C5, C6  | 38.12   | 0.77   |           |          |
| C7, C8  | 37.52   | 0.03   |           |          |
| D1, D2  | 37.90   | 1.24   |           |          |
| D3, D4  | 39.86   |        |           |          |
| D5, D6  | 38.97   | 0.57   |           |          |

### Amplification Curves

|                |             |         |         |         |         |
|----------------|-------------|---------|---------|---------|---------|
| A1: M1         | A2: M1      | A3: M2  | A4: M2  | A5: M3  | A6: M3  |
| A7: M4         | A8: M4      | B1: M5  | B2: M5  | B3: M6  | B4: M6  |
| B5: M7         | B6: M7      | B7: M8  | B8: M8  | C1: M9  | C2: M9  |
| C3: M10        | C4: M10     | C5: M11 | C6: M11 | C7: M12 | C8: M12 |
| D1: M13        | D2: M13     | D3: M14 | D4: M14 | D5: M15 | D6: M15 |
| D7: NEG RT 221 | D8: NTC 221 |         |         |         |         |





**131115 mir320a NORMO MACRO a**

**Experiment**

|               |                           |                    |   |
|---------------|---------------------------|--------------------|---|
| Creation Date | 18/04/2020 04:02:54 p. m. | Last Modified Date | 18/04/2020 04:05:31 p. m.               |
| Operator      | System Admin              | Owner              | System Admin                            |
| Start Time    | 13/11/2015 09:19:32 a. m. | End Time           | 13/11/2015 11:02:54 a. m.               |
| Run State     | Completed                 | Software Version   | LCS480 1.5.0.39 (Converted from LCS4 4. |
| Macro         |                           | Macro Owner        |   |
| Macro Status  |                           |                    |   |
| Templates     | 04FEB14_PATY Run Protocol | Plate ID           |   |
| Test ID       |                           | Lot ID             |   |
| Color Comp ID |                           |                    |   |
| Run Notes     |                           |                    |   |

**Programs**

| Program Name | Program          |                 |                  |                       |                 |                |                     |
|--------------|------------------|-----------------|------------------|-----------------------|-----------------|----------------|---------------------|
| Cycles       | 1                | Analysis Mode   | None             |                       |                 |                |                     |
| Target (°C)  | Acquisition Mode | Hold (hh:mm:ss) | Ramp Rate (°C/s) | Acquisitions (per °C) | Sec Target (°C) | Step size (°C) | Step Delay (cycles) |
| 95           | None             | 00:10:00        | 20.00            |                       | 0               | 0              | 0                   |

| Program Name | Program          |                 |                  |                       |                 |                |                     |
|--------------|------------------|-----------------|------------------|-----------------------|-----------------|----------------|---------------------|
| Cycles       | 50               | Analysis Mode   | Quantification   |                       |                 |                |                     |
| Target (°C)  | Acquisition Mode | Hold (hh:mm:ss) | Ramp Rate (°C/s) | Acquisitions (per °C) | Sec Target (°C) | Step size (°C) | Step Delay (cycles) |
| 95           | None             | 00:00:10        | 20.00            |                       | 0               | 0              | 0                   |
| 55           | None             | 00:00:30        | 20.00            |                       | 0               | 0              | 0                   |
| 72           | Single           | 00:00:30        | 20.00            |                       | 0               | 0              | 0                   |

| Program Name | Program          |                 |                  |                       |                 |                |                     |
|--------------|------------------|-----------------|------------------|-----------------------|-----------------|----------------|---------------------|
| Cycles       | 1                | Analysis Mode   | None             |                       |                 |                |                     |
| Target (°C)  | Acquisition Mode | Hold (hh:mm:ss) | Ramp Rate (°C/s) | Acquisitions (per °C) | Sec Target (°C) | Step size (°C) | Step Delay (cycles) |
| 40           | None             | 00:10:00        | 20.00            |                       | 0               | 0              | 0                   |

**Samples**

| Sample Count | 32          |    |          |              |
|--------------|-------------|----|----------|--------------|
| Subset       | All Samples |    |          |              |
| Pos          | Name        | ID | Repl. Of | Sample Notes |
| A1           | M14         |    | A1       |              |
| A2           | M14         |    | A1       |              |

**Samples**

| Sample Count | 32          |    |          |              |
|--------------|-------------|----|----------|--------------|
| Subset       | All Samples |    |          |              |
| Pos          | Name        | ID | Repl. Of | Sample Notes |
| A3           | M15         |    | A3       |              |
| A4           | M15         |    | A3       |              |
| A5           | M16         |    | A5       |              |
| A6           | M16         |    | A5       |              |
| A7           | M17         |    | A7       |              |
| A8           | M17         |    | A7       |              |
| B1           | M18         |    | B1       |              |
| B2           | M18         |    | B1       |              |
| B3           | M19         |    | B3       |              |
| B4           | M19         |    | B3       |              |
| B5           | M20         |    | B5       |              |
| B6           | M20         |    | B5       |              |
| B7           | M135        |    | B7       |              |
| B8           | M135        |    | B7       |              |
| C1           | M136        |    | C1       |              |
| C2           | M136        |    | C1       |              |
| C3           | M137        |    | C3       |              |
| C4           | M137        |    | C3       |              |
| C5           | M138        |    | C5       |              |
| C6           | M138        |    | C5       |              |
| C7           | M139        |    | C7       |              |
| C8           | M139        |    | C7       |              |
| D1           | M140        |    | D1       |              |
| D2           | M140        |    | D1       |              |
| D3           | M141        |    | D3       |              |
| D4           | M141        |    | D3       |              |
| D5           | M142        |    | D5       |              |
| D6           | M142        |    | D5       |              |
| D7           | NEG RT      |    |          |              |
| D8           | NTC         |    |          |              |

**Revision History**

| Revision | Date | User | Reason |
|----------|------|------|--------|
|          |      |      |        |

**Abs Quant/2nd Derivative Max for All Samples (Abs Quant/2nd Derivative Max)****Results**

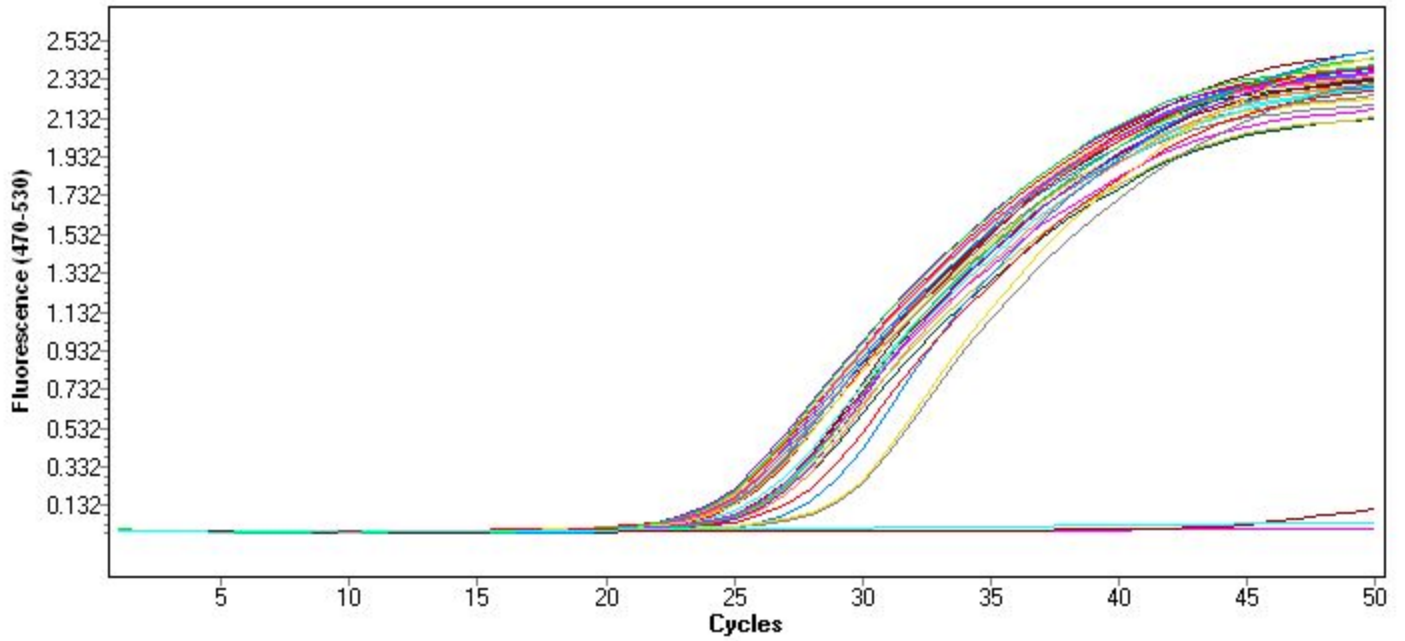
| Inc | Pos | Name | Type | CP | Concentration | Standard | Status |
|-----|-----|------|------|----|---------------|----------|--------|
|-----|-----|------|------|----|---------------|----------|--------|

**Results**

| Inc                                 | Pos | Name   | Type    | CP | Concentration | Standard | Status |
|-------------------------------------|-----|--------|---------|----|---------------|----------|--------|
| <input checked="" type="checkbox"/> | A1  | M14    | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | A2  | M14    | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | A3  | M15    | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | A4  | M15    | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | A5  | M16    | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | A6  | M16    | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | A7  | M17    | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | A8  | M17    | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | B1  | M18    | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | B2  | M18    | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | B3  | M19    | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | B4  | M19    | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | B5  | M20    | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | B6  | M20    | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | B7  | M135   | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | B8  | M135   | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | C1  | M136   | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | C2  | M136   | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | C3  | M137   | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | C4  | M137   | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | C5  | M138   | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | C6  | M138   | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | C7  | M139   | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | C8  | M139   | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | D1  | M140   | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | D2  | M140   | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | D3  | M141   | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | D4  | M141   | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | D5  | M142   | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | D6  | M142   | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | D7  | NEG RT | Unknown |    |               |          |        |
| <input checked="" type="checkbox"/> | D8  | NTC    | Unknown |    |               |          |        |

### Amplification Curves

|          |          |          |          |          |          |            |          |
|----------|----------|----------|----------|----------|----------|------------|----------|
| A1: M14  | A2: M14  | A3: M15  | A4: M15  | A5: M16  | A6: M16  | A7: M17    | A8: M17  |
| B1: M18  | B2: M18  | B3: M19  | B4: M19  | B5: M20  | B6: M20  | B7: M135   | B8: M135 |
| C1: M136 | C2: M136 | C3: M137 | C4: M137 | C5: M138 | C6: M138 | C7: M139   | C8: M139 |
| D1: M140 | D2: M140 | D3: M141 | D4: M141 | D5: M142 | D6: M142 | D7: NEG RT | D8: NTC  |





## 080415 mir106a NEWBORNS

8-abr-15

Cp

|      | CAPILLARY | SAMPLE NEWBORN<br>LOW BW    |        | MEAN Cp |
|------|-----------|-----------------------------|--------|---------|
| True | 7         | FEB13 M31 MIR 106A          | 27.3   | 27.27   |
| True | 8         | Repl. of FEB13 M31 MIR 106A | 27.24  |         |
| True | 1         | M32                         | 25.72  | 25.73   |
| True | 2         | Repl. of M32                | 25.74  |         |
| True | 3         | M33                         | 27.29  | 27.2    |
| True | 4         | Repl. of M33                | 27.11  |         |
| True | 5         | M34                         | 25.26  | 25.27   |
| True | 6         | Repl. of M34                | 25.28  |         |
| True | 7         | M35                         | 26.01  | 25.865  |
| True | 8         | Repl. of M35                | 25.72  |         |
| True | 9         | M36                         | 28     | 27.935  |
| True | 10        | Repl. of M36                | 27.87  |         |
| True | 11        | M37                         | 25.59  | 25.585  |
| True | 12        | Repl. of M37                | 25.58  |         |
| True | 13        | M38                         | 25.53  | 25.555  |
| True | 14        | Repl. of M38                | 25.58  |         |
| True | 15        | M39                         | 25.51  | 25.515  |
| True | 16        | Repl. of M39                | 25.52  |         |
| True | 17        | M40                         | 27.49  | 27.54   |
| True | 18        | Repl. of M40                | 27.59  |         |
|      |           | <b>NORMAL BW</b>            |        |         |
| True | 19        | M1                          | 28.11  | 28.075  |
| True | 20        | Repl. of M1                 | 28.04  |         |
| True | 21        | M2                          | 28.97  | 28.985  |
| True | 22        | Repl. of M2                 | 29     |         |
| True | 23        | M3                          | 27.19  | 27.225  |
| True | 24        | Repl. of M3                 | 27.26  |         |
| True | 25        | M4                          | 27.87  | 27.845  |
| True | 26        | Repl. of M4                 | 27.82  |         |
| True | 27        | M5                          | 28.29  | 28.325  |
| True | 28        | Repl. of M5                 | 28.36  |         |
| True | 29        | NEG RT LOW BW               | >45.00 |         |
| True | 30        | NEG RT NORMAL BW            | >45.00 |         |
| True | 31        | NTC                         |        |         |
| True | 1         | M6                          | 28.38  | 28.36   |
| True | 2         | Repl. of M6                 | 28.34  |         |
| True | 3         | M7                          | 27.19  | 27.175  |
| True | 4         | Repl. of M7                 | 27.16  |         |
| True | 5         | M8                          | 28.12  | 28.14   |
| True | 6         | Repl. of M8                 | 28.16  |         |
| True | 7         | M9                          | 28.8   | 28.83   |
| True | 8         | Repl. of M9                 | 28.86  |         |
| True | 9         | M10                         | 29.07  | 29.08   |
| True | 10        | Repl. of M10                | 29.09  |         |

MACROSOMIA

|      |    |                   |         |        |
|------|----|-------------------|---------|--------|
| True | 11 | M61               | 25.95   | 25.985 |
| True | 12 | Repl. of M61      | 26.02   |        |
| True | 13 | M62               | 25.73   | 25.77  |
| True | 14 | Repl. of M62      | 25.81   |        |
| True | 15 | M63               | 26.15   | 26.19  |
| True | 16 | Repl. of M63      | 26.23   |        |
| True | 17 | M64               | 25.97   | 26.01  |
| True | 18 | Repl. of M64      | 26.05   |        |
| True | 19 | M65               | 26.05   | 26.13  |
| True | 20 | Repl. of M65      | 26.21   |        |
| True | 21 | M66               | 26.77   | 26.815 |
| True | 22 | Repl. of M66      | 26.86   |        |
| True | 23 | M67               | 25.69   | 25.7   |
| True | 24 | Repl. of M67      | 25.71   |        |
| True | 25 | M68               | 24.87   | 24.97  |
| True | 26 | Repl. of M68      | 25.07   |        |
| True | 27 | M69               | 26.87   | 26.89  |
| True | 28 | Repl. of M69      | 26.91   |        |
| True | 29 | M70               | 25.23   | 25.41  |
| True | 30 | Repl. of M70      | 25.59   |        |
| True | 31 | NEG RT MACROSOMIA | >45.00  |        |
| True | 32 | NTC               | [15.50] |        |

RUN1

**Crossing Point Cp mir 106a**

BIRTH WEIGHT

| Cp Mean     |        | Cp Mean |              |
|-------------|--------|---------|--------------|
| miRNA       | LOW    | miRNA   | <b>NORMO</b> |
| M31         | 27.27  | M1      | 28.075       |
| M32         | 25.73  | M2      | 28.985       |
| M33         | 27.2   | M3      | 27.225       |
| M34         | 25.27  | M4      | 27.845       |
| M35         | 25.865 | M5      | 28.325       |
| M36         | 27.935 | M6      | 28.36        |
| M37         | 25.585 | M7      | 27.175       |
| M38         | 25.555 | M8      | 28.14        |
| M39         | 25.515 | M9      | 28.83        |
| M40         | 27.54  | M10     | 29.08        |
| <b>MEAN</b> | 26.35  |         | 28.20        |
| <b>SD</b>   | 1.01   |         | 0.66         |
| <b>SEM</b>  | 0.32   |         | 0.21         |



|       | Cp Mean    |
|-------|------------|
| miRNA | MACROSOMIA |
| M61   | 25.985     |
| M62   | 25.77      |
| M63   | 26.19      |
| M64   | 26.01      |
| M65   | 26.13      |
| M66   | 26.815     |
| M67   | 25.7       |
| M68   | 24.97      |
| M69   | 26.89      |
| M70   | 25.41      |
|       | 25.99      |
|       | 0.58       |
|       | 0.18       |



Expression miR-16-5p

| True | CAPILLARY | SAMPLE NEWBORN   | Cp       | MEAN Cp |   |
|------|-----------|------------------|----------|---------|---|
|      | 1         | M31              | 24.34    | 24.27   | 0 |
| True | 2         | Repl. of M31     | 24.2     |         | 0 |
| True | 3         | M32              | 22.12    | 22.1    | 0 |
| True | 4         | Repl. of M32     | 22.08    |         | 0 |
| True | 5         | M33              | 23.99    | 24.025  | 0 |
| True | 6         | Repl. of M33     | 24.06    |         | 0 |
| True | 7         | M34              | 21.88    | 21.9    | 0 |
| True | 8         | Repl. of M34     | 21.92    |         | 0 |
| True | 9         | M35              | 22.73    | 22.685  | 0 |
| True | 10        | Repl. of M35     | 22.64    |         | 0 |
| True | 11        | M36              | 23.98    | 23.99   | 0 |
| True | 12        | Repl. of M36     | 24       |         | 0 |
| True | 13        | M37              | 22.21    | 22.24   | 0 |
| True | 14        | Repl. of M37     | 22.27    |         | 0 |
| True | 15        | M38              | 22.55    | 22.6    | 0 |
| True | 16        | Repl. of M38     | 22.65    |         | 0 |
| True | 17        | M39              | 22.48    | 22.52   | 0 |
| True | 18        | Repl. of M39     | 22.56    |         | 0 |
| True | 19        | M40              | 23.45    | 23.29   | 0 |
| True | 20        | Repl. of M40     | 23.13    |         | 0 |
| True | 21        | M1               | 23.28    | 23.3    | 0 |
| True | 22        | Repl. of M1      | 23.32    |         | 0 |
| True | 23        | M2               | 24.64    | 24.685  | 0 |
| True | 24        | Repl. of M2      | 24.73    |         | 0 |
| True | 25        | M3               | 23.12    | 23.115  | 0 |
| True | 26        | Repl. of M3      | 23.11    |         | 0 |
| True | 27        | M4               | 23.29    | 23.26   | 0 |
| True | 28        | Repl. of M4      | 23.23    |         | 0 |
| True | 29        | NEG RT LOW BW    |          |         | 0 |
| True | 30        | NEG RT NORMAL BW |          |         | 0 |
| True | 31        | NEG RT HIGH BW   | [>45.00] |         | 0 |
| True | 32        | NTC              |          |         | 0 |
| True | 1         | M5               | 24       | 23.99   | 0 |
| True | 2         | Repl. of M5      | 23.98    |         | 0 |
| True | 3         | M6               | 24.18    | 24.14   | 0 |
| True | 4         | Repl. of M6      | 24.1     |         | 0 |
| True | 5         | M7               | 22.78    | 22.76   | 0 |
| True | 6         | Repl. of M7      | 22.74    |         | 0 |
| True | 7         | M8               | 23.92    | 23.92   | 0 |
| True | 8         | Repl. of M8      | 23.92    |         | 0 |
| True | 9         | M9               | 24.75    | 24.755  | 0 |
| True | 10        | Repl. of M9      | 24.76    |         | 0 |
| True | 11        | M10              | 24.2     | 24.195  | 0 |
| True | 12        | Repl. of M10     | 24.19    |         | 0 |
| True | 31        | NTC              |          |         | 0 |

|      |                      |       |        |   |
|------|----------------------|-------|--------|---|
| True | 3 M61                | 22.29 | 21.86  | 0 |
| True | 4 Repl. of M61       | 21.43 |        | 0 |
| True | 5 M62                | 21.08 | 21.115 | 0 |
| True | 6 Repl. of M62       | 21.15 |        | 0 |
| True | 7 M63                | 22.1  | 22.12  | 0 |
| True | 8 Repl. of M63       | 22.14 |        | 0 |
| True | 9 M64                | 22.05 | 21.985 | 0 |
| True | 10 Repl. of M64      | 21.92 |        | 0 |
| True | 11 M65               | 22.3  | 22.13  | 0 |
| True | 12 Repl. of M65      | 21.96 |        | 0 |
| True | 13 M66               | 22.98 | 22.99  | 0 |
| True | 14 Repl. of M66      | 23    |        | 0 |
| True | 15 M67               | 21.67 | 21.65  | 0 |
| True | 16 Repl. of M67      | 21.63 |        | 0 |
| True | 17 M68               | 21.5  | 21.525 | 0 |
| True | 18 Repl. of M68      | 21.55 |        | 0 |
| True | 19 M69               | 23.55 | 23.475 | 0 |
| True | 20 Repl. of M69      | 23.4  |        | 0 |
| True | 21 M70               | 21.56 | 21.565 | 0 |
| True | 22 Repl. of M70      | 21.57 |        | 0 |
| True | 25 NEG RT MACROSOMIC |       |        | 0 |
| True | 26 NTC               |       |        | 0 |



**Crossing Point Cp mir 16-5p****BIRTH WEIGHT**

|             | Cp Mean |       | Cp Mean       |       |
|-------------|---------|-------|---------------|-------|
| miRNA       | LOW     | miRNA | <b>NORMAL</b> | miRNA |
| M31         | 24.27   | M1    | 23.3          | M61   |
| M32         | 22.1    | M2    | 24.685        | M62   |
| M33         | 24.025  | M3    | 23.115        | M63   |
| M34         | 21.9    | M4    | 23.26         | M64   |
| M35         | 22.685  | M5    | 23.99         | M65   |
| M36         | 23.99   | M6    | 24.14         | M66   |
| M37         | 22.24   | M7    | 22.76         | M67   |
| M38         | 22.6    | M8    | 23.92         | M68   |
| M39         | 22.52   | M9    | 24.755        | M69   |
| M40         | 23.29   | M10   | 24.195        | M70   |
| <b>MEAN</b> | 22.96   |       | 23.81         |       |
| <b>SD</b>   | 0.87    |       | 0.68          |       |
| <b>SEM</b>  | 0.27    |       | 0.21          |       |



RELATIVE QUANTIFICATION OF GENE EXPRESSION OF miRNAs USING LIGHTCYCLER (ROCHE)

miRNA EXPRESSION IN NEONATAL SCREENING CARDS  
 SAMPLES FROM SAN LUIS POTOSÍ (SLP)

| qPCR<br>Experiment | Duplicate per type<br>of sample<br>BIRTH WEIGHT | 2 miRNAs REFERENCE (HK)<br>Specific Cp for each gene per capillary |         | TARGET    |
|--------------------|---|--|---------|-----------|
|                    |   | mir16-5p   | mir106a | mir486-5p |
|                    | <b>Normal M1</b>                                | 23.28  | 28.11   | 25.13     |
|                    | <b>M1 Rep</b>                                   | 23.32  | 28.04   | 25.12     |
|                    | <b>M2</b>                                       | 24.64  | 28.97   | 23.98     |
|                    | <b>M2</b>                                       | 24.73  | 29      | 24.16     |
|                    | <b>M3</b>                                       | 23.12  | 27.19   | 22.31     |
|                    | <b>M3</b>                                       | 23.11  | 27.26   | 22.26     |
|                    | <b>M4</b>                                       | 23.29  | 27.87   | 24.41     |
|                    | <b>M4</b>                                       | 23.23  | 27.82   | 24.45     |
|                    | <b>M5</b>                                       | 24   | 28.29   | 27.02     |
|                    | <b>M5</b>                                       | 23.98  | 28.36   | 26.95     |
|                    | <b>M6</b>                                       | 24.18  | 28.38   | 24.83     |
|                    | <b>M6</b>                                       | 24.1   | 28.34   | 24.83     |
|                    | <b>M7</b>                                       | 22.78  | 27.19   | 22.18     |
|                    | <b>M7</b>                                       | 22.74  | 27.16   | 22.41     |
|                    | <b>M8</b>                                       | 23.92  | 28.12   | 23.66     |
|                    | <b>M8</b>                                       | 23.92  | 28.16   | 23.64     |
|                    | <b>M9</b>                                       | 24.75  | 28.8    | 22.95     |
|                    | <b>M9</b>                                       | 24.76  | 28.86   | 22.95     |
|                    | <b>M10</b>                                      | 24.2   | 29.07   | 24.11     |
|                    | <b>M10</b>                                      | 24.19  | 29.09   | 24.06     |
|                    | <b>Normal M11</b>                               | 22.99  | 28.81   | 22.69     |
|                    | <b>M11</b>                                      | 21.96  | 27.85   | 22.74     |
|                    | <b>M12</b>                                      | 23.16  | 27.67   | 22.07     |
|                    | <b>M12</b>                                      | 22.24  | 28.52   | 22.17     |
|                    | <b>M13</b>                                      | 22.4   | 28.16   | 22.25     |
|                    | <b>M13</b>                                      | 21.79  | 29.29   | 22.4      |
|                    | <b>M14</b>                                      | 22.8   | 31.39   | 22.21     |
|                    | <b>M14</b>                                      | 22.27  | 31.95   | 22.29     |
|                    | <b>M15</b>                                      | 21.05  | 27.74   | 20.74     |
|                    | <b>M15</b>                                      | 22.34  | 28.69   | 20.9      |
|                    | <b>M16</b>                                      | 23.45  | 28.31   | 22.83     |
|                    | <b>M16</b>                                      | 23.21  | 29.86   | 22.81     |
|                    | <b>M17</b>                                      | 24.12  | 30.41   | 23.76     |
|                    | <b>M17</b>                                      | 25.15  | 29.94   | 23.6      |
|                    | <b>M18</b>                                      | 22.82  | 30.03   | 22.91     |
|                    | <b>M18</b>                                      | 23.12  | 30      | 22.85     |
|                    | <b>M19</b>                                      | 25.18  | 29.31   | 23.32     |
|                    | <b>M19</b>                                      | 24.47  | 29.32   | 23.24     |
|                    | <b>Low M31</b>                                  | 24.34  | 27.3    | 29        |
|                    | <b>M31</b>                                      | 24.2   | 27.24   | 28.99     |

|                 |       |       |       |
|-----------------|-------|-------|-------|
| M32             | 22.12 | 25.72 | 22.24 |
| M32             | 22.08 | 25.74 | 22.23 |
| M33             | 23.99 | 27.29 | 24.03 |
| M33             | 24.06 | 27.11 | 24.06 |
| M34             | 21.88 | 25.26 | 22.23 |
| M34             | 21.92 | 25.28 | 22.2  |
| M35             | 22.73 | 26.01 | 23.34 |
| M35             | 22.64 | 25.72 | 23.37 |
| M36             | 23.98 | 28    | 24.27 |
| M36             | 24    | 27.87 | 24.22 |
| M37             | 22.21 | 25.59 | 22.56 |
| M37             | 22.27 | 25.58 | 22.6  |
| M38             | 22.55 | 25.53 | 22.41 |
| M38             | 22.65 | 25.58 | 22.53 |
| M39             | 22.48 | 25.51 | 22.86 |
| M39             | 22.56 | 25.52 | 22.91 |
| M40             | 23.45 | 27.49 | 23.13 |
| M40             | 23.13 | 27.59 | 23.13 |
| Low M41         | 24.05 | 28.69 | 22.79 |
| M41             | 24.07 | 28.65 | 22.81 |
| M42             | 25.99 | 29.47 | 23.11 |
| M42             | 25.92 | 29.35 | 23.12 |
| M43             | 23.38 | 28.7  | 22.23 |
| M43             | 23.27 | 28.4  | 22.23 |
| M44             | 24.87 | 29.88 | 22.29 |
| M44             | 24.94 | 30.07 | 22.42 |
| M45             | 24.48 | 28.77 | 21.67 |
| M45             | 24.43 | 28.86 | 21.83 |
| M46             | 25.14 | 29.49 | 22.58 |
| M46             | 25.07 | 29.61 | 22.58 |
| M47             | 25.34 | 30.4  | 23.06 |
| M47             | 25.3  | 30.35 | 23.03 |
| M48             | 23.37 | 28.78 | 21.94 |
| M48             | 24.13 | 28.8  | 21.78 |
| M49             | 23.33 | 28.43 | 22.04 |
| M49             | 23.67 | 28.43 | 22.04 |
| Macrosomia M135 | 20.87 | 26.51 | 22.02 |
| M135            | 20.81 | 26.4  | 21.99 |
| M136            | 22.76 | 26.8  | 23.78 |
| M136            | 21.61 | 26.75 | 23.98 |
| M137            | 22.12 | 27.57 | 22.16 |
| M137            | 22.13 | 26.91 | 22.18 |
| M138            | 21.62 | 26.99 | 23.45 |
| M138            | 21.6  | 26.95 | 23.48 |
| M139            | 22.36 | 27.14 | 24.53 |
| M139            | 21.64 | 27.15 | 24.6  |
| M140            | 23.96 | 29.28 | 26.13 |
| M140            | 23.15 | 29.27 | 26.15 |

|                       |       |       |       |
|-----------------------|-------|-------|-------|
| <b>M141</b>           | 22.58 | 27.75 | 23.68 |
| <b>M141</b>           | 22.55 | 27.74 | 23.68 |
| <b>M142</b>           | 23.03 | 28.95 | 24.91 |
| <b>M142</b>           | 22.99 | 28.98 | 24.94 |
| <b>M143</b>           | 22.3  | 28.13 | 23.46 |
| <b>M143</b>           | 22.13 | 28.1  | 23.53 |
| <b>M144</b>           | 23.08 | 28.55 | 23.91 |
| <b>M144</b>           | 22.99 | 28.83 | 23.91 |
| <b>Macrosomia M88</b> | 25.72 | 31.22 | 24.04 |
| <b>M88</b>            | 25.61 | 31.22 | 24.04 |
| <b>M89</b>            | 25.24 | 30.61 | 22.67 |
| <b>M89</b>            | 25.31 | 30.59 | 22.64 |
| <b>M90</b>            | 25.57 | 32.69 | 23.15 |
| <b>M90</b>            | 25.48 | 32.57 | 22.96 |
| <b>M145</b>           | 25.07 | 31.55 | 22.62 |
| <b>M145</b>           | 25.14 | 31.63 | 22.77 |
| <b>M146</b>           | 23.73 | 28.51 | 22.05 |
| <b>M146</b>           | 23.69 | 28.48 | 22.18 |
| <b>M147</b>           | 24.63 | 31.39 | 22.35 |
| <b>M147</b>           | 24.6  | 31.28 | 22.39 |
| <b>M148</b>           | 24.71 | 31.8  | 22.89 |
| <b>M148</b>           | 24.85 | 31.74 | 22.9  |
| <b>M149</b>           | 24.07 | 31    | 22.27 |
| <b>M149</b>           | 24.05 | 31.02 | 22.34 |
| <b>M150</b>           | 24.66 | 31.32 | 23.02 |
| <b>M150</b>           | 24.71 | 31.49 | 22.98 |
| <b>M151</b>           | 24.41 | 31.11 | 22.53 |
| <b>M151</b>           | 24.38 | 31.12 | 22.54 |

|         | EXAMPLE      |            |  |
|---------|--------------|------------|--|
| REL EXP | LOG BASE 10  | LOG BASE 2 |  |
| 0.5     | -0.301029996 | -1         |  |
| 1       | 0            | 0          |  |
| 2       | 0.301029996  | 1          |  |

|                 |            |       |       |       |
|-----------------|------------|-------|-------|-------|
| M50 NO          | <b>M50</b> | 26.04 | 31.91 | 23.46 |
| PREVIOUS MIRNAS | <b>M50</b> | 25.89 | 31.87 | 23.95 |
| NOT USED        | <b>M20</b> | 26.54 | 29.97 | 22.73 |
|                 | <b>M20</b> | 26.29 | 30.03 | 22.76 |

NBW  
LBW  
HBW

CALIBRATOR:  
NBW 1

| MED GEOM 2 HK | $\Delta CT$ mir486-5p | $\Delta\Delta CT$ mir486-5p | $2^{-(\Delta\Delta CT \text{ mir486-5p})}$ |
|---------------|-----------------------|-----------------------------|--|
| 25.58125876   | -0.446293229          | 2.144203368                 | 0.226                                      |
| 25.57132769   | -0.456293229          | 2.134203368                 | 0.228                                      |
| 26.71742503   | -2.768727449          | -0.178230852                | 1.131                                      |
| 26.78002987   | -2.588727449          | 0.001769148                 | 0.999                                      |
| 25.07255073   | -2.775962611          | -0.185466014                | 1.137                                      |
| 25.09937449   | -2.825962611          | -0.235466014                | 1.177                                      |
| 25.47728989   | -1.039453336          | 1.551043261                 | 0.341                                      |
| 25.42161679   | -0.999453336          | 1.591043261                 | 0.332                                      |
| 26.0568609    | 0.95246682            | 3.542963417                 | 0.086                                      |
| 26.07820546   | 0.88246682            | 3.472963417                 | 0.090                                      |
| 26.19596152   | -1.33505771           | 1.255438888                 | 0.419                                      |
| 26.1341539    | -1.33505771           | 1.255438888                 | 0.419                                      |
| 24.88751092   | -2.689720213          | -0.099223616                | 1.071                                      |
| 24.8519295    | -2.459720213          | 0.130776384                 | 0.913                                      |
| 25.93511905   | -2.284338785          | 0.306157812                 | 0.809                                      |
| 25.95355852   | -2.304338785          | 0.286157812                 | 0.820                                      |
| 26.69831455   | -3.764912025          | -1.174415428                | 2.257                                      |
| 26.7315095    | -3.764912025          | -1.174415428                | 2.257                                      |
| 26.52346131   | -2.415281274          | 0.175215323                 | 0.886                                      |
| 26.52710124   | -2.465281274          | 0.125215323                 | 0.917                                      |
| 25.73600396   | -2.543134411          | 0.047362186                 | 0.968                                      |
| 24.73026486   | -2.493134411          | 0.097362186                 | 0.935                                      |
| 25.31476249   | -3.179886954          | -0.589390356                | 1.505                                      |
| 25.18501142   | -3.079886954          | -0.489390356                | 1.404                                      |
| 25.11541359   | -2.939305073          | -0.348808475                | 1.274                                      |
| 25.26319655   | -2.789305073          | -0.198808475                | 1.148                                      |
| 26.75242045   | -4.503437261          | -1.912940664                | 3.766                                      |
| 26.67445407   | -4.423437261          | -1.832940664                | 3.563                                      |
| 24.16458152   | -4.000633858          | -1.410137261                | 2.658                                      |
| 25.3166862    | -3.840633858          | -1.250137261                | 2.379                                      |
| 25.76566514   | -3.215759675          | -0.625263078                | 1.542                                      |
| 26.32585421   | -3.235759675          | -0.645263078                | 1.564                                      |
| 27.08300574   | -3.50184361           | -0.911347013                | 1.881                                      |
| 27.44068148   | -3.66184361           | -1.071347013                | 2.101                                      |
| 26.1779411    | -3.347113925          | -0.756617327                | 1.690                                      |
| 26.33628675   | -3.407113925          | -0.816617327                | 1.761                                      |
| 27.16663027   | -3.65604077           | -1.065544173                | 2.093                                      |
| 26.78545127   | -3.73604077           | -1.145544173                | 2.212                                      |
| 25.77754837   | 3.273702689           | 5.864199287                 | 0.017                                      |
| 25.67504625   | 3.263702689           | 5.854199287                 | 0.017                                      |

|             |              |              |       |
|-------------|--------------|--------------|-------|
| 23.8521781  | -1.606021935 | 0.984474663  | 0.505 |
| 23.83986577 | -1.616021935 | 0.974474663  | 0.509 |
| 25.58685405 | -1.533182307 | 1.057314291  | 0.481 |
| 25.53951057 | -1.503182307 | 1.087314291  | 0.471 |
| 23.50933432 | -1.294730879 | 1.295765718  | 0.407 |
| 23.54012744 | -1.324730879 | 1.265765718  | 0.416 |
| 24.31475478 | -0.882832209 | 1.707664388  | 0.306 |
| 24.13090964 | -0.852832209 | 1.737664388  | 0.300 |
| 25.91215931 | -1.617436891 | 0.973059706  | 0.509 |
| 25.86271447 | -1.667436891 | 0.923059706  | 0.527 |
| 23.84017408 | -1.293931767 | 1.296564831  | 0.407 |
| 23.86768946 | -1.253931767 | 1.336564831  | 0.396 |
| 23.99378044 | -1.622119759 | 0.968376839  | 0.511 |
| 24.07045907 | -1.502119759 | 1.088376839  | 0.470 |
| 23.94712509 | -1.110762217 | 1.47973438   | 0.359 |
| 23.99439935 | -1.060762217 | 1.52973438   | 0.346 |
| 25.38977156 | -2.195767579 | 0.394729018  | 0.761 |
| 25.2617636  | -2.195767579 | 0.394729018  | 0.761 |
| 26.26774638 | -3.474043601 | -0.883547004 | 1.845 |
| 26.26034082 | -3.454043601 | -0.863547004 | 1.820 |
| 27.67535546 | -4.518544274 | -1.928047677 | 3.805 |
| 27.58173309 | -4.508544274 | -1.918047677 | 3.779 |
| 25.90378351 | -3.575568271 | -0.985071673 | 1.979 |
| 25.70735303 | -3.575568271 | -0.985071673 | 1.979 |
| 27.26014673 | -5.03264252  | -2.442145923 | 5.434 |
| 27.38513831 | -4.90264252  | -2.312145923 | 4.966 |
| 26.53845512 | -4.875614492 | -2.285117894 | 4.874 |
| 26.55277387 | -4.715614492 | -2.125117894 | 4.362 |
| 27.2282684  | -4.656934022 | -2.066437424 | 4.189 |
| 27.24559964 | -4.656934022 | -2.066437424 | 4.189 |
| 27.75492749 | -4.672562085 | -2.082065487 | 4.234 |
| 27.71019668 | -4.702562085 | -2.112065487 | 4.323 |
| 25.93431318 | -4.208051854 | -1.617555257 | 3.069 |
| 26.36179053 | -4.368051854 | -1.777555257 | 3.428 |
| 25.7540657  | -3.807558089 | -1.217061492 | 2.325 |
| 25.94105048 | -3.807558089 | -1.217061492 | 2.325 |
| 23.5215582  | -1.460250076 | 1.130246521  | 0.457 |
| 23.43894196 | -1.490250076 | 1.100246521  | 0.466 |
| 24.69753024 | -0.590282288 | 2.00021431   | 0.250 |
| 24.04303433 | -0.390282288 | 2.20021431   | 0.218 |
| 24.69510883 | -2.389176232 | 0.201320365  | 0.870 |
| 24.40324364 | -2.369176232 | 0.221320365  | 0.858 |
| 24.15623729 | -0.691700203 | 1.898796395  | 0.268 |
| 24.12716312 | -0.661700203 | 1.928796395  | 0.263 |
| 24.63433376 | 0.093365308  | 2.683861905  | 0.156 |
| 24.23893562 | 0.163365308  | 2.753861905  | 0.148 |
| 26.48676651 | -0.128763578 | 2.461733019  | 0.182 |
| 26.03076065 | -0.108763578 | 2.481733019  | 0.179 |

|             |              |              |       |
|-------------|--------------|--------------|-------|
| 25.03187967 | -1.341308684 | 1.249187914  | 0.421 |
| 25.01073769 | -1.341308684 | 1.249187914  | 0.421 |
| 25.8208927  | -0.906357788 | 1.68413881   | 0.311 |
| 25.81182287 | -0.876357788 | 1.71413881   | 0.305 |
| 25.04593779 | -1.531459183 | 1.059037415  | 0.480 |
| 24.93698057 | -1.461459183 | 1.129037415  | 0.457 |
| 25.66970978 | -1.7973226   | 0.793173997  | 0.577 |
| 25.74493542 | -1.7973226   | 0.793173997  | 0.577 |
| 28.3368735  | -4.266543061 | -1.676046464 | 3.196 |
| 28.27621262 | -4.266543061 | -1.676046464 | 3.196 |
| 27.79561836 | -5.14032962  | -2.549833023 | 5.856 |
| 27.82504088 | -5.17032962  | -2.579833023 | 5.979 |
| 28.91164644 | -5.709673401 | -3.119176803 | 8.689 |
| 28.80770036 | -5.899673401 | -3.309176803 | 9.912 |
| 28.12398443 | -5.54144433  | -2.950947733 | 7.733 |
| 28.19890423 | -5.39144433  | -2.800947733 | 6.969 |
| 26.01042676 | -3.942622665 | -1.352126068 | 2.553 |
| 25.97481857 | -3.812622665 | -1.222126068 | 2.333 |
| 27.80531784 | -5.422482277 | -2.83198568  | 7.121 |
| 27.73964672 | -5.382482277 | -2.79198568  | 6.926 |
| 28.03173202 | -5.168114761 | -2.577618164 | 5.970 |
| 28.0844975  | -5.158114761 | -2.567618164 | 5.928 |
| 27.31611246 | -5.044840259 | -2.454343662 | 5.481 |
| 27.31356806 | -4.974840259 | -2.384343662 | 5.221 |
| 27.79120724 | -4.822985992 | -2.232489395 | 4.699 |
| 27.89476474 | -4.862985992 | -2.272489395 | 4.832 |
| 27.55712431 | -5.020867697 | -2.4303711   | 5.390 |
| 27.54461109 | -5.010867697 | -2.4203711   | 5.353 |

|             |              |              |       |
|-------------|--------------|--------------|-------|
| 28.82596746 | -5.315385166 | -2.724888568 | 6.611 |
| 28.72480287 | -4.825385166 | -2.234888568 | 4.707 |

|             |             |              |             |
|-------------|-------------|--------------|-------------|
| 28.20290411 | -5.42037283 | -2.689132421 | 6.449254584 |
| 28.09784155 | -5.39037283 | -2.659132421 | 6.316530843 |



**FINAL WITH SOME REPETITIONS INCLUDED**

**OK**

Rep= replicate  
Below the name of each sample

**LOG BASE 2**

LOG2 EXPRESSION  
-2.144203368  
-2.134203368  
0.178230852  
-0.001769148  
0.185466014  
0.235466014  
-1.551043261  
-1.591043261  
-3.542963417  
-3.472963417  
-1.255438888  
-1.255438888  
0.099223616  
-0.130776384  
-0.306157812  
-0.286157812  
1.174415428  
1.174415428  
-0.175215323  
-0.125215323  
-0.047362186  
-0.097362186  
0.589390356  
0.489390356  
0.348808475  
0.198808475  
1.912940664  
1.832940664  
1.410137261  
1.250137261  
0.625263078  
0.645263078  
0.911347013  
1.071347013  
0.756617327  
0.816617327  
1.065544173  
1.145544173  
-5.864199287  
-5.854199287

**MEAN NORMAL**

**1.341**

**SD**

**0.886**

|                 |              |
|-----------------|--------------|
| <b>SEM</b>      | -0.984474663 |
| <b>0.144</b>    | -0.974474663 |
|                 | -1.057314291 |
|                 | -1.087314291 |
|                 | -1.295765718 |
|                 | -1.265765718 |
|                 | -1.707664388 |
|                 | -1.737664388 |
|                 | -0.973059706 |
|                 | -0.923059706 |
|                 | -1.296564831 |
|                 | -1.336564831 |
|                 | -0.968376839 |
|                 | -1.088376839 |
|                 | -1.47973438  |
|                 | -1.52973438  |
|                 | -0.394729018 |
|                 | -0.394729018 |
|                 | 0.883547004  |
|                 | 0.863547004  |
|                 | 1.928047677  |
|                 | 1.918047677  |
|                 | 0.985071673  |
|                 | 0.985071673  |
|                 | 2.442145923  |
|                 | 2.312145923  |
|                 | 2.285117894  |
|                 | 2.125117894  |
|                 | 2.066437424  |
|                 | 2.066437424  |
|                 | 2.082065487  |
|                 | 2.112065487  |
|                 | 1.617555257  |
|                 | 1.777555257  |
| <b>MEAN LOW</b> | 1.217061492  |
| <b>1.879</b>    | 1.217061492  |
| <b>SD</b>       | -1.130246521 |
| <b>1.756</b>    | -1.100246521 |
| <b>SEM</b>      | -2.00021431  |
| <b>0.285</b>    | -2.20021431  |
|                 | -0.201320365 |
|                 | -0.221320365 |
|                 | -1.898796395 |
|                 | -1.928796395 |
|                 | -2.683861905 |
|                 | -2.753861905 |
|                 | -2.461733019 |
|                 | -2.481733019 |

-1.249187914  
-1.249187914  
-1.68413881  
-1.71413881  
-1.059037415  
-1.129037415  
-0.793173997  
-0.793173997  
1.676046464  
1.676046464  
2.549833023  
2.579833023  
3.119176803  
3.309176803  
2.950947733  
2.800947733  
1.352126068  
1.222126068  
2.83198568  
2.79198568  
2.577618164  
2.567618164  
2.454343662  
2.384343662  
2.232489395  
2.272489395  
2.4303711  
2.4203711

**MEAN MACRO**

**3.030**

**SD**

**3.001**

**SEM**

**0.474**

2.259479552

1.612506685

MACRO VS NORMAL

MACRO VS LOW

RELATIVE QUANTIFICATION OF GENE EXPRESSION OF miRNAs USING LIGHTCYCLER (ROCHE)  
miRNA EXPRESSION IN NEONATAL SCREENING CARDS  
NEW MIRNAS

| qPCR<br>Experiment | Duplicate per type<br>of sample<br>BIRTH WEIGHT | 2 miRNAs REFERENCIA (HK)<br>Specific Cp for each gene per capillary |         | TARGET    |
|--------------------|---|---|---------|-----------|
|                    |   | mir16-5p  | mir106a | mir126-3p |
|                    | <b>Normal M1</b>                                | 23.28   | 28.11   | 31.87     |
|                    | <b>M1 Rep</b>                                   | 23.32   | 28.04   | 31.9      |
|                    | <b>M2</b>                                       | 24.64   | 28.97   | 31.84     |
|                    | <b>M2</b>                                       | 24.73   | 29      | 31.79     |
|                    | <b>M3</b>                                       | 23.12   | 27.19   | 31.61     |
|                    | <b>M3</b>                                       | 23.11   | 27.26   | 31.66     |
|                    | <b>M4</b>                                       | 23.29   | 27.87   | 31.12     |
|                    | <b>M4</b>                                       | 23.23   | 27.82   | 31.15     |
|                    | <b>M5</b>                                       | 24  | 28.29   | 32.68     |
|                    | <b>M5</b>                                       | 23.98   | 28.36   | 32.7      |
|                    | <b>M6</b>                                       | 24.18   | 28.38   | 32.85     |
|                    | <b>M6</b>                                       | 24.1  | 28.34   | 32.84     |
|                    | <b>M7</b>                                       | 22.78   | 27.19   | 30.72     |
|                    | <b>M7</b>                                       | 22.74   | 27.16   | 30.7      |
|                    | <b>M8</b>                                       | 23.92   | 28.12   | 32.22     |
|                    | <b>M8</b>                                       | 23.92   | 28.16   | 32.04     |
|                    | <b>M9</b>                                       | 24.75   | 28.8    | 32.95     |
|                    | <b>M9</b>                                       | 24.76   | 28.86   | 33.09     |
|                    | <b>M10</b>                                      | 24.2  | 29.07   | 32.12     |
|                    | <b>M10</b>                                      | 24.19   | 29.09   | 32.12     |
|                    | <b>Normal M11</b>                               | 22.99   | 28.81   | 31.87     |
|                    | <b>M11</b>                                      | 21.96   | 27.85   | 31.83     |
|                    | <b>M12</b>                                      | 23.16   | 27.67   | 32.28     |
|                    | <b>M12</b>                                      | 22.24   | 28.52   | 32.4      |
|                    | <b>M13</b>                                      | 22.4  | 28.16   | 31.73     |
|                    | <b>M13</b>                                      | 21.79   | 29.29   | 31.61     |
|                    | <b>M14</b>                                      | 22.8  | 31.39   | 31.83     |
|                    | <b>M14</b>                                      | 22.27   | 31.95   | 31.84     |
|                    | <b>M15</b>                                      | 21.05   | 27.74   | 31.59     |
|                    | <b>M15</b>                                      | 22.34   | 28.69   | 31.65     |
|                    | <b>M16</b>                                      | 23.45   | 28.31   | 31.54     |
|                    | <b>M16</b>                                      | 23.21   | 29.86   | 31.78     |
|                    | <b>M17</b>                                      | 24.12   | 30.41   | 32.81     |
|                    | <b>M17</b>                                      | 25.15   | 29.94   | 32.93     |
|                    | <b>M18</b>                                      | 22.82   | 30.03   | 32.13     |
|                    | <b>M18</b>                                      | 23.12   | 30      | 32.2      |
|                    | <b>M19</b>                                      | 25.18   | 29.31   | 31.34     |
|                    | <b>M19</b>                                      | 24.47   | 29.32   | 31.21     |
|                    | <b>Low M31</b>                                  | 24.34   | 27.3    | 31.75     |
|                    | <b>M31</b>                                      | 24.2  | 27.24   | 31.73     |

RE-PERFORMED  
M37 AND M38

|                 |       |       |       |
|-----------------|-------|-------|-------|
| M32             | 22.12 | 25.72 | 30    |
| M32             | 22.08 | 25.74 | 30.06 |
| M33             | 23.99 | 27.29 | 31.27 |
| M33             | 24.06 | 27.11 | 31.2  |
| M34             | 21.88 | 25.26 | 30.9  |
| M34             | 21.92 | 25.28 | 31.02 |
| M35             | 22.73 | 26.01 | 30.81 |
| M35             | 22.64 | 25.72 | 30.82 |
| M36             | 23.98 | 28    | 32.15 |
| M36             | 24    | 27.87 | 32.09 |
| M37             | 22.21 | 25.59 | 37.36 |
| M37             | 22.27 | 25.58 | 37.24 |
| M38             | 22.55 | 25.53 | 37.33 |
| M38             | 22.65 | 25.58 | 37.7  |
| M39             | 22.48 | 25.51 | 31.51 |
| M39             | 22.56 | 25.52 | 31.55 |
| M40             | 23.45 | 27.49 | 32.36 |
| M40             | 23.13 | 27.59 | 32.42 |
| Low M41         | 24.05 | 28.69 | 31.35 |
| M41             | 24.07 | 28.65 | 31.36 |
| M42             | 25.99 | 29.47 | 32.11 |
| M42             | 25.92 | 29.35 | 32.04 |
| M43             | 23.38 | 28.7  | 31.26 |
| M43             | 23.27 | 28.4  | 31.25 |
| M44             | 24.87 | 29.88 | 33.2  |
| M44             | 24.94 | 30.07 | 33.06 |
| M45             | 24.48 | 28.77 | 31.89 |
| M45             | 24.43 | 28.86 | 31.86 |
| M46             | 25.14 | 29.49 | 31.92 |
| M46             | 25.07 | 29.61 | 31.96 |
| M47             | 25.34 | 30.4  | 31.76 |
| M47             | 25.3  | 30.35 | 31.68 |
| M48             | 23.37 | 28.78 | 31.4  |
| M48             | 24.13 | 28.8  | 31.38 |
| M49             | 23.33 | 28.43 | 31.06 |
| M49             | 23.67 | 28.43 | 31.12 |
| Macrosomia M135 | 20.87 | 26.51 | 30.51 |
| M135            | 20.81 | 26.4  | 30.57 |
| M136            | 22.76 | 26.8  | 32.18 |
| M136            | 21.61 | 26.75 | 32.04 |
| M137            | 22.12 | 27.57 | 34.19 |
| M137            | 22.13 | 26.91 | 33.87 |
| M138            | 21.62 | 26.99 | 31.61 |
| M138            | 21.6  | 26.95 | 31.58 |
| M139            | 22.36 | 27.14 | 31.71 |
| M139            | 21.64 | 27.15 | 31.7  |
| M140            | 23.96 | 29.28 | 33.77 |
| M140            | 23.15 | 29.27 | 33.61 |

|                       |       |       |       |
|-----------------------|-------|-------|-------|
| <b>M141</b>           | 22.58 | 27.75 | 32.32 |
| <b>M141</b>           | 22.55 | 27.74 | 32.37 |
| <b>M142</b>           | 23.03 | 28.95 | 33.06 |
| <b>M142</b>           | 22.99 | 28.98 | 33.1  |
| <b>M143</b>           | 22.3  | 28.13 | 32.38 |
| <b>M143</b>           | 22.13 | 28.1  | 32.17 |
| <b>M144</b>           | 23.08 | 28.55 | 33.47 |
| <b>M144</b>           | 22.99 | 28.83 | 33.39 |
| <b>Macrosomia M88</b> | 25.72 | 31.22 | 33.18 |
| <b>M88</b>            | 25.61 | 31.22 | 33.32 |
| <b>M89</b>            | 25.24 | 30.61 | 32.37 |
| <b>M89</b>            | 25.31 | 30.59 | 32.3  |
| <b>M90</b>            | 25.57 | 32.69 | 33.08 |
| <b>M90</b>            | 25.48 | 32.57 | 33.07 |
| <b>M145</b>           | 25.07 | 31.55 | 31.78 |
| <b>M145</b>           | 25.14 | 31.63 | 31.78 |
| <b>M146</b>           | 23.73 | 28.51 | 30.8  |
| <b>M146</b>           | 23.69 | 28.48 | 30.74 |
| <b>M147</b>           | 24.63 | 31.39 | 31.81 |
| <b>M147</b>           | 24.6  | 31.28 | 31.88 |
| <b>M148</b>           | 24.71 | 31.8  | 31.65 |
| <b>M148</b>           | 24.85 | 31.74 | 31.62 |
| <b>M149</b>           | 24.07 | 31    | 30.94 |
| <b>M149</b>           | 24.05 | 31.02 | 30.96 |
| <b>M150</b>           | 24.66 | 31.32 | 31.1  |
| <b>M150</b>           | 24.71 | 31.49 | 31.09 |
| <b>M151</b>           | 24.41 | 31.11 | 30.88 |
| <b>M151</b>           | 24.38 | 31.12 | 31.04 |

|         | EXAMPLE      |            |  |
|---------|--------------|------------|--|
| REL EXP | LOG BASE 10  | LOG BASE 2 |  |
| 0.5     | -0.301029996 | -1         |  |
| 1       | 0            | 0          |  |
| 2       | 0.301029996  | 1          |  |

|                 |            |       |       |       |
|-----------------|------------|-------|-------|-------|
| M50 NO          | <b>M50</b> | 26.04 | 31.91 | 32.17 |
| PREVIOUS MIRNAS | <b>M50</b> | 25.89 | 31.87 | 32.21 |
|                 | <b>M20</b> | 26.54 | 29.97 | 31.58 |
|                 | <b>M20</b> | 26.29 | 30.03 | 31.49 |

NBW

LBW

HBW

**CALIBRATOR:**

**NBW 1**

| MED GEOM 2 HK | $\Delta CT$ mir126-3p | $\Delta \Delta CT$ mir126-3p | $2^{-(\Delta \Delta CT \text{ mir126-3p})}$ |
|---------------|-----------------------|------------------------------|---|
| 25.58125876   | 6.293706771           | 0.269729684                  | 0.829                                       |
| 25.57132769   | 6.323706771           | 0.299729684                  | 0.812                                       |
| 26.71742503   | 5.091272551           | -0.932704536                 | 1.909                                       |
| 26.78002987   | 5.041272551           | -0.982704536                 | 1.976                                       |
| 25.07255073   | 6.524037389           | 0.500060302                  | 0.707                                       |
| 25.09937449   | 6.574037389           | 0.550060302                  | 0.683                                       |
| 25.47728989   | 5.670546664           | -0.353430423                 | 1.278                                       |
| 25.42161679   | 5.700546664           | -0.323430423                 | 1.251                                       |
| 26.0568609    | 6.61246682            | 0.588489733                  | 0.665                                       |
| 26.07820546   | 6.63246682            | 0.608489733                  | 0.656                                       |
| 26.19596152   | 6.68494229            | 0.660965203                  | 0.632                                       |
| 26.1341539    | 6.67494229            | 0.650965203                  | 0.637                                       |
| 24.88751092   | 5.850279787           | -0.1736973                   | 1.128                                       |
| 24.8519295    | 5.830279787           | -0.1936973                   | 1.144                                       |
| 25.93511905   | 6.275661215           | 0.251684128                  | 0.840                                       |
| 25.95355852   | 6.095661215           | 0.071684128                  | 0.952                                       |
| 26.69831455   | 6.235087975           | 0.211110888                  | 0.864                                       |
| 26.7315095    | 6.375087975           | 0.351110888                  | 0.784                                       |
| 26.52346131   | 5.594718726           | -0.429258361                 | 1.347                                       |
| 26.52710124   | 5.594718726           | -0.429258361                 | 1.347                                       |
| 25.73600396   | 6.636865589           | 0.612888502                  | 0.654                                       |
| 24.73026486   | 6.596865589           | 0.572888502                  | 0.672                                       |
| 25.31476249   | 7.030113046           | 1.00613596                   | 0.498                                       |
| 25.18501142   | 7.150113046           | 1.12613596                   | 0.458                                       |
| 25.11541359   | 6.540694927           | 0.51671784                   | 0.699                                       |
| 25.26319655   | 6.420694927           | 0.39671784                   | 0.760                                       |
| 26.75242045   | 5.116562739           | -0.907414348                 | 1.876                                       |
| 26.67445407   | 5.126562739           | -0.897414348                 | 1.863                                       |
| 24.16458152   | 6.849366142           | 0.825389055                  | 0.564                                       |
| 25.3166862    | 6.909366142           | 0.885389055                  | 0.541                                       |
| 25.76566514   | 5.494240325           | -0.529736762                 | 1.444                                       |
| 26.32585421   | 5.734240325           | -0.289736762                 | 1.222                                       |
| 27.08300574   | 5.54815639            | -0.475820697                 | 1.391                                       |
| 27.44068148   | 5.66815639            | -0.355820697                 | 1.280                                       |
| 26.1779411    | 5.872886075           | -0.151091012                 | 1.110                                       |
| 26.33628675   | 5.942886075           | -0.081091012                 | 1.058                                       |
| 27.16663027   | 4.36395923            | -1.660017857                 | 3.160                                       |
| 26.78545127   | 4.23395923            | -1.790017857                 | 3.458                                       |
| 25.77754837   | 6.023702689           | -0.000274398                 | 1.000                                       |
| 25.67504625   | 6.003702689           | -0.020274398                 | 1.014                                       |

|             |             |              |       |
|-------------|-------------|--------------|-------|
| 23.8521781  | 6.153978065 | 0.130000979  | 0.914 |
| 23.83986577 | 6.213978065 | 0.190000979  | 0.877 |
| 25.58685405 | 5.706817693 | -0.317159394 | 1.246 |
| 25.53951057 | 5.636817693 | -0.387159394 | 1.308 |
| 23.50933432 | 7.375269121 | 1.351292034  | 0.392 |
| 23.54012744 | 7.495269121 | 1.471292034  | 0.361 |
| 24.31475478 | 6.587167791 | 0.563190704  | 0.677 |
| 24.13090964 | 6.597167791 | 0.573190704  | 0.672 |
| 25.91215931 | 6.262563109 | 0.238586022  | 0.848 |
| 25.86271447 | 6.202563109 | 0.178586022  | 0.884 |
| 23.84017408 | 13.50606823 | 7.482091147  | 0.006 |
| 23.86768946 | 13.38606823 | 7.362091147  | 0.006 |
| 23.99378044 | 13.29788024 | 7.273903155  | 0.006 |
| 24.07045907 | 13.66788024 | 7.643903155  | 0.005 |
| 23.94712509 | 7.539237783 | 1.515260696  | 0.350 |
| 23.99439935 | 7.579237783 | 1.555260696  | 0.340 |
| 25.38977156 | 7.034232421 | 1.010255334  | 0.496 |
| 25.2617636  | 7.094232421 | 1.070255334  | 0.476 |
| 26.26774638 | 5.085956399 | -0.938020688 | 1.916 |
| 26.26034082 | 5.095956399 | -0.928020688 | 1.903 |
| 27.67535546 | 4.481455726 | -1.542521361 | 2.913 |
| 27.58173309 | 4.411455726 | -1.612521361 | 3.058 |
| 25.90378351 | 5.454431729 | -0.569545357 | 1.484 |
| 25.70735303 | 5.444431729 | -0.579545357 | 1.494 |
| 27.26014673 | 5.87735748  | -0.146619607 | 1.107 |
| 27.38513831 | 5.73735748  | -0.286619607 | 1.220 |
| 26.53845512 | 5.344385508 | -0.679591578 | 1.602 |
| 26.55277387 | 5.314385508 | -0.709591578 | 1.635 |
| 27.2282684  | 4.683065978 | -1.340911109 | 2.533 |
| 27.24559964 | 4.723065978 | -1.300911109 | 2.464 |
| 27.75492749 | 4.027437915 | -1.996539172 | 3.990 |
| 27.71019668 | 3.947437915 | -2.076539172 | 4.218 |
| 25.93431318 | 5.251948146 | -0.772028941 | 1.708 |
| 26.36179053 | 5.231948146 | -0.792028941 | 1.732 |
| 25.7540657  | 5.212441911 | -0.811535176 | 1.755 |
| 25.94105048 | 5.272441911 | -0.751535176 | 1.684 |
| 23.5215582  | 7.029749924 | 1.005772837  | 0.498 |
| 23.43894196 | 7.089749924 | 1.065772837  | 0.478 |
| 24.69753024 | 7.809717712 | 1.785740626  | 0.290 |
| 24.04303433 | 7.669717712 | 1.645740626  | 0.320 |
| 24.69510883 | 9.640823768 | 3.616846681  | 0.082 |
| 24.40324364 | 9.320823768 | 3.296846681  | 0.102 |
| 24.15623729 | 7.468299797 | 1.444322711  | 0.367 |
| 24.12716312 | 7.438299797 | 1.414322711  | 0.375 |
| 24.63433376 | 7.273365308 | 1.249388221  | 0.421 |
| 24.23893562 | 7.263365308 | 1.239388221  | 0.424 |
| 26.48676651 | 7.511236422 | 1.487259335  | 0.357 |
| 26.03076065 | 7.351236422 | 1.327259335  | 0.399 |



|             |             |              |       |
|-------------|-------------|--------------|-------|
| 25.03187967 | 7.298691316 | 1.274714229  | 0.413 |
| 25.01073769 | 7.348691316 | 1.324714229  | 0.399 |
| 25.8208927  | 7.243642212 | 1.219665125  | 0.429 |
| 25.81182287 | 7.283642212 | 1.259665125  | 0.418 |
| 25.04593779 | 7.388540817 | 1.364563731  | 0.388 |
| 24.93698057 | 7.178540817 | 1.154563731  | 0.449 |
| 25.66970978 | 7.7626774   | 1.738700313  | 0.300 |
| 25.74493542 | 7.6826774   | 1.658700313  | 0.317 |
| 28.3368735  | 4.873456939 | -1.150520148 | 2.220 |
| 28.27621262 | 5.013456939 | -1.010520148 | 2.015 |
| 27.79561836 | 4.55967038  | -1.464306707 | 2.759 |
| 27.82504088 | 4.48967038  | -1.534306707 | 2.896 |
| 28.91164644 | 4.220326599 | -1.803650488 | 3.491 |
| 28.80770036 | 4.210326599 | -1.813650488 | 3.515 |
| 28.12398443 | 3.61855567  | -2.405421417 | 5.298 |
| 28.19890423 | 3.61855567  | -2.405421417 | 5.298 |
| 26.01042676 | 4.807377335 | -1.216599752 | 2.324 |
| 25.97481857 | 4.747377335 | -1.276599752 | 2.423 |
| 27.80531784 | 4.037517723 | -1.986459364 | 3.963 |
| 27.73964672 | 4.107517723 | -1.916459364 | 3.775 |
| 28.03173202 | 3.591885239 | -2.432091848 | 5.397 |
| 28.0844975  | 3.561885239 | -2.462091848 | 5.510 |
| 27.31611246 | 3.625159741 | -2.398817346 | 5.274 |
| 27.31356806 | 3.645159741 | -2.378817346 | 5.201 |
| 27.79120724 | 3.257014008 | -2.766963079 | 6.807 |
| 27.89476474 | 3.247014008 | -2.776963079 | 6.854 |
| 27.55712431 | 3.329132303 | -2.694844784 | 6.475 |
| 27.54461109 | 3.489132303 | -2.534844784 | 5.795 |

NOT USED

|             |             |              |             |
|-------------|-------------|--------------|-------------|
| 28.82596746 | 3.394614834 | -2.629362252 | 6.188       |
| 28.72480287 | 3.434614834 | -2.589362252 | 6.018       |
| 28.20290411 | 3.42962717  | -2.462382421 | 5.511260884 |
| 28.09784155 | 3.33962717  | -2.552382421 | 5.866021752 |

OK

Rep= replicate  
Below the name of each sample

**LOG BASE 2**

LOG2 EXPRESSION  
-0.269729684  
-0.299729684  
0.932704536  
0.982704536  
-0.500060302  
-0.550060302  
0.353430423  
0.323430423  
-0.588489733  
-0.608489733  
-0.660965203  
-0.650965203  
0.1736973  
0.1936973  
-0.251684128  
-0.071684128  
-0.211110888  
-0.351110888  
0.429258361  
0.429258361  
-0.612888502  
-0.572888502  
-1.00613596  
-1.12613596  
-0.51671784  
-0.39671784  
0.907414348  
0.897414348  
-0.825389055  
-0.885389055  
0.529736762  
0.289736762  
0.475820697  
0.355820697  
0.151091012  
0.081091012  
1.660017857  
1.790017857  
0.000274398  
0.020274398

**MEAN NORMAL**  
**1.135**  
**MACRO/NORMAL**  
**2.081**

**MACRO/LBW**

1.785

-0.130000979  
-0.190000979  
0.317159394  
0.387159394  
-1.351292034  
-1.471292034  
-0.563190704  
-0.573190704  
-0.238586022  
-0.178586022  
-7.482091147  
-7.362091147  
-7.273903155  
-7.643903155  
-1.515260696  
-1.555260696  
-1.010255334  
-1.070255334  
0.938020688  
0.928020688  
1.542521361  
1.612521361  
0.569545357  
0.579545357  
0.146619607  
0.286619607  
0.679591578  
0.709591578  
1.340911109  
1.300911109  
1.996539172  
2.076539172  
0.772028941  
0.792028941  
0.811535176  
0.751535176  
-1.005772837  
-1.065772837  
-1.785740626  
-1.645740626  
-3.616846681  
-3.296846681  
-1.444322711  
-1.414322711  
-1.249388221  
-1.239388221  
-1.487259335  
-1.327259335

**MEAN LOW**

1.323

-1.274714229  
-1.324714229  
-1.219665125  
-1.259665125  
-1.364563731  
-1.154563731  
-1.738700313  
-1.658700313  
1.150520148  
1.010520148  
1.464306707  
1.534306707  
1.803650488  
1.813650488  
2.405421417  
2.405421417  
1.216599752  
1.276599752  
1.986459364  
1.916459364  
2.432091848  
2.462091848  
2.398817346  
2.378817346  
2.766963079  
2.776963079  
2.694844784  
2.534844784

**MEAN MACRO**  
**2.363**

**RELATIVE QUANTIFICATION OF GENE EXPRESSION OF miRNAs USING LIGHTCYCLER (ROCHE)  
miRNA EXPRESSION IN NEONATAL SCREENING CARDS**

| qPCR<br>Experiment | Duplicate per type<br>of sample | 2 miRNAs REFERENCIA (HK)<br>Specific Cp for each gene per capillary |         | TARGET    |
|--------------------|---------------------------------|---|---------|-----------|
|                    | BIRTH WEIGHT                    | mir16-5p  | mir106a | mir29a 5p |
|                    | <b>Normopeso M1</b>             | 23.28   | 28.11   | 35.65     |
|                    | <b>M1 Rep</b>                   | 23.32   | 28.04   | 36.88     |
|                    | <b>M2</b>                       | 24.64   | 28.97   | 35.77     |
|                    | <b>M2</b>                       | 24.73   | 29      | 36.99     |
|                    | <b>M3</b>                       | 23.12   | 27.19   | 35.64     |
|                    | <b>M3</b>                       | 23.11   | 27.26   | 37.9      |
|                    | <b>M4</b>                       | 23.29   | 27.87   | 35.07     |
|                    | <b>M4</b>                       | 23.23   | 27.82   | 34.86     |
|                    | <b>M5</b>                       | 24  | 28.29   | 35.02     |
|                    | <b>M5</b>                       | 23.98   | 28.36   | 35.33     |
|                    | <b>M6</b>                       | 24.18   | 28.38   | 35.79     |
|                    | <b>M6</b>                       | 24.1  | 28.34   | 35.94     |
|                    | <b>M7</b>                       | 22.78   | 27.19   | 35.83     |
|                    | <b>M7</b>                       | 22.74   | 27.16   | 35.85     |
|                    | <b>M8</b>                       | 23.92   | 28.12   | 36.27     |
|                    | <b>M8</b>                       | 23.92   | 28.16   | 36.1      |
|                    | <b>M9</b>                       | 24.75   | 28.8    | 35.78     |
|                    | <b>M9</b>                       | 24.76   | 28.86   | 36.85     |
|                    | <b>M10</b>                      | 24.2  | 29.07   | 35.95     |
|                    | <b>M10</b>                      | 24.19   | 29.09   | 36        |
|                    | <b>Normopeso M11</b>            | 22.99   | 28.81   | 36.35     |
|                    | <b>M11</b>                      | 21.96   | 27.85   | 36.92     |
|                    | <b>M12</b>                      | 23.16   | 27.67   | 36.28     |
|                    | <b>M12</b>                      | 22.24   | 28.52   | 36.28     |
|                    | <b>M13</b>                      | 22.4  | 28.16   | 36.92     |
|                    | <b>M13</b>                      | 21.79   | 29.29   | 35.75     |
|                    | <b>M14</b>                      | 22.8  | 31.39   | 35.98     |
|                    | <b>M14</b>                      | 22.27   | 31.95   | 36.37     |
|                    | <b>M15</b>                      | 21.05   | 27.74   | 36.92     |
|                    | <b>M15</b>                      | 22.34   | 28.69   | 36.28     |
|                    | <b>M16</b>                      | 23.45   | 28.31   | 36.14     |
|                    | <b>M16</b>                      | 23.21   | 29.86   | 36.14     |
|                    | <b>M18</b>                      | 22.82   | 30.03   | 33.65     |
|                    | <b>M18</b>                      | 23.12   | 30      | 33.85     |
|                    | <b>Bajo peso M31</b>            | 24.34   | 27.3    | 33.67     |
|                    | <b>M31</b>                      | 24.2  | 27.24   | 34.09     |
|                    | <b>M32</b>                      | 22.12   | 25.72   | 33.82     |
|                    | <b>M32</b>                      | 22.08   | 25.74   | 33.97     |
|                    | <b>M33</b>                      | 23.99   | 27.29   | 34.16     |
|                    | <b>M33</b>                      | 24.06   | 27.11   | 33.93     |

|                |       |       |       |
|----------------|-------|-------|-------|
| M34            | 21.88 | 25.26 | 33.96 |
| M34            | 21.92 | 25.28 | 33.37 |
| M35            | 22.73 | 26.01 | 33.95 |
| M35            | 22.64 | 25.72 | 33.87 |
| M36            | 23.98 | 28    | 34    |
| M36            | 24    | 27.87 | 33.09 |
| M37            | 22.21 | 25.59 | 33.93 |
| M37            | 22.27 | 25.58 | 33.9  |
| M38            | 22.55 | 25.53 | 33.53 |
| M38            | 22.65 | 25.58 | 33.06 |
| M39            | 22.48 | 25.51 | 34.01 |
| M39            | 22.56 | 25.52 | 34.09 |
| M40            | 23.45 | 27.49 | 33.89 |
| M40            | 23.13 | 27.59 | 33.83 |
| Bajo peso M41  | 24.05 | 28.69 | 34.39 |
| M41            | 24.07 | 28.65 | 34.03 |
| M42            | 25.99 | 29.47 | 35.4  |
| M42            | 25.92 | 29.35 | 35.54 |
| M43            | 23.38 | 28.7  | 35.77 |
| M43            | 23.27 | 28.4  | 35.41 |
| M44            | 24.87 | 29.88 | 35.07 |
| M44            | 24.94 | 30.07 | 35.15 |
| M45            | 24.48 | 28.77 | 35.6  |
| M45            | 24.43 | 28.86 | 34.95 |
| M46            | 25.14 | 29.49 | 35.72 |
| M46            | 25.07 | 29.61 | 35.81 |
| M47            | 25.34 | 30.4  | 35.85 |
| M47            | 25.3  | 30.35 | 35.9  |
| M48            | 23.37 | 28.78 | 35.79 |
| M48            | 24.13 | 28.8  | 36.08 |
| M49            | 23.33 | 28.43 | 35.4  |
| M49            | 23.67 | 28.43 | 35    |
| M50            | 26.04 | 31.91 | 35.15 |
| M50            | 25.89 | 31.87 | 35.86 |
| Alto peso M135 | 20.87 | 26.51 | 34.79 |
| M135           | 20.81 | 26.4  | 35.68 |
| M136           | 22.76 | 26.8  | 35.63 |
| M136           | 21.61 | 26.75 | 36.08 |
| M137           | 22.12 | 27.57 | 36.7  |
| M137           | 22.13 | 26.91 | 36.28 |
| M138           | 21.62 | 26.99 | 35.3  |
| M138           | 21.6  | 26.95 | 35.51 |
| M139           | 22.36 | 27.14 | 35.5  |
| M139           | 21.64 | 27.15 | 35.42 |
| M140           | 23.96 | 29.28 | 36.74 |
| M140           | 23.15 | 29.27 | 35.92 |
| M141           | 22.58 | 27.75 | 33.41 |
| M141           | 22.55 | 27.74 | 33.16 |

|      |       |       |       |
|------|-------|-------|-------|
| M142 | 23.03 | 28.95 | 32.99 |
| M142 | 22.99 | 28.98 | 33.36 |
| M143 | 22.3  | 28.13 | 33.6  |
| M143 | 22.13 | 28.1  | 33.27 |
| M144 | 23.08 | 28.55 | 33.32 |
| M144 | 22.99 | 28.83 | 33.13 |
| M146 | 23.73 | 28.51 | 33.15 |
| M146 | 23.69 | 28.48 | 32.81 |
| M147 | 24.63 | 31.39 | 33.23 |
| M147 | 24.6  | 31.28 | 33.32 |
| M148 | 24.71 | 31.8  | 33.13 |
| M148 | 24.85 | 31.74 | 33.08 |
| M149 | 24.07 | 31    | 33.14 |
| M149 | 24.05 | 31.02 | 33.18 |
| M150 | 24.66 | 31.32 | 33.13 |
| M150 | 24.71 | 31.49 | 33.51 |
| M151 | 24.41 | 31.11 | 32.94 |
| M151 | 24.38 | 31.12 | 32.77 |

| NOT USED   |               | mir16-5p | mir106a | mir29a 5p |
|------------|---------------|----------|---------|-----------|
| NORMOPESO  | M20           | 26.54    | 29.97   | 33.85     |
|            | M20           | 26.29    | 30.03   | 33.87     |
|            | M17           | 24.12    | 30.41   | 33.92     |
|            | M17           | 25.15    | 29.94   | 33.64     |
|            | M19           | 25.18    | 29.31   | 33.94     |
|            | M19           | 24.47    | 29.32   | 34.05     |
| MACROSOMIC | M90           | 25.57    | 32.69   | 33.29     |
|            | M90           | 25.48    | 32.57   | 33.22     |
|            | Alto peso M88 | 25.72    | 31.22   | 33.44     |
|            | M88           | 25.61    | 31.22   | 33.05     |
|            | M89           | 25.24    | 30.61   | 32.83     |
|            | M89           | 25.31    | 30.59   | 33.08     |
|            | M145          | 25.07    | 31.55   | 33.23     |
|            | M145          | 25.14    | 31.63   | 33.19     |

NBW  
LBW  
HBW

**CALIBRATOR:**  
**NBW 1**

| MED GEOM 2 HK | $\Delta$ CT mir29a 5p | $\Delta\Delta$ CT mir29a 5p | $2^{-(\Delta\Delta$ CT mir29a 5p) |
|---------------|-----------------------|-----------------------------|-----------------------------------|
| 25.58125876   | 10.07370677           | -0.107084349                | 1.077                             |
| 25.57132769   | 11.30370677           | 1.122915651                 | 0.459                             |
| 26.71742503   | 9.021272551           | -1.159518569                | 2.234                             |
| 26.78002987   | 10.24127255           | 0.060481431                 | 0.959                             |
| 25.07255073   | 10.55403739           | 0.37324627                  | 0.772                             |
| 25.09937449   | 12.81403739           | 2.63324627                  | 0.161                             |
| 25.47728989   | 9.620546664           | -0.560244456                | 1.475                             |
| 25.42161679   | 9.410546664           | -0.770244456                | 1.706                             |
| 26.0568609    | 8.95246682            | -1.2283243                  | 2.343                             |
| 26.07820546   | 9.26246682            | -0.9183243                  | 1.890                             |
| 26.19596152   | 9.62494229            | -0.555848829                | 1.470                             |
| 26.1341539    | 9.77494229            | -0.405848829                | 1.325                             |
| 24.88751092   | 10.96027979           | 0.779488667                 | 0.583                             |
| 24.8519295    | 10.98027979           | 0.799488667                 | 0.575                             |
| 25.93511905   | 10.32566121           | 0.144870096                 | 0.904                             |
| 25.95355852   | 10.15566121           | -0.025129904                | 1.018                             |
| 26.69831455   | 9.065087975           | -1.115703145                | 2.167                             |
| 26.7315095    | 10.13508797           | -0.045703145                | 1.032                             |
| 26.52346131   | 9.424718726           | -0.756072394                | 1.689                             |
| 26.52710124   | 9.474718726           | -0.706072394                | 1.631                             |
| 25.73600396   | 11.11686559           | 0.936074469                 | 0.523                             |
| 24.73026486   | 11.68686559           | 1.506074469                 | 0.352                             |
| 25.31476249   | 11.03011305           | 0.849321927                 | 0.555                             |
| 25.18501142   | 11.03011305           | 0.849321927                 | 0.555                             |
| 25.11541359   | 11.73069493           | 1.549903808                 | 0.342                             |
| 25.26319655   | 10.56069493           | 0.379903808                 | 0.768                             |
| 26.75242045   | 9.266562739           | -0.914228381                | 1.885                             |
| 26.67445407   | 9.656562739           | -0.524228381                | 1.438                             |
| 24.16458152   | 12.17936614           | 1.998575023                 | 0.250                             |
| 25.3166862    | 11.53936614           | 1.358575023                 | 0.390                             |
| 25.76566514   | 10.09424032           | -0.086550794                | 1.062                             |
| 26.32585421   | 10.09424032           | -0.086550794                | 1.062                             |
| 26.1779411    | 7.392886075           | -2.787905044                | 6.906                             |
| 26.33628675   | 7.592886075           | -2.587905044                | 6.012                             |
| 25.77754837   | 7.943702689           | -2.23708843                 | 4.714                             |
| 25.67504625   | 8.363702689           | -1.81708843                 | 3.524                             |
| 23.8521781    | 9.973978065           | -0.206813054                | 1.154                             |
| 23.83986577   | 10.12397807           | -0.056813054                | 1.040                             |
| 25.58685405   | 8.596817693           | -1.583973426                | 2.998                             |
| 25.53951057   | 8.366817693           | -1.813973426                | 3.516                             |



|             |             |              |       |
|-------------|-------------|--------------|-------|
| 23.50933432 | 10.43526912 | 0.254478001  | 0.838 |
| 23.54012744 | 9.845269121 | -0.335521999 | 1.262 |
| 24.31475478 | 9.727167791 | -0.453623329 | 1.369 |
| 24.13090964 | 9.647167791 | -0.533623329 | 1.448 |
| 25.91215931 | 8.112563109 | -2.068228011 | 4.194 |
| 25.86271447 | 7.202563109 | -2.978228011 | 7.880 |
| 23.84017408 | 10.07606823 | -0.104722886 | 1.075 |
| 23.86768946 | 10.04606823 | -0.134722886 | 1.098 |
| 23.99378044 | 9.497880241 | -0.682910878 | 1.605 |
| 24.07045907 | 9.027880241 | -1.152910878 | 2.224 |
| 23.94712509 | 10.03923778 | -0.141553337 | 1.103 |
| 23.99439935 | 10.11923778 | -0.061553337 | 1.044 |
| 25.38977156 | 8.564232421 | -1.616558699 | 3.066 |
| 25.2617636  | 8.504232421 | -1.676558699 | 3.197 |
| 26.26774638 | 8.125956399 | -2.054834721 | 4.155 |
| 26.26034082 | 7.765956399 | -2.414834721 | 5.333 |
| 27.67535546 | 7.771455726 | -2.409335394 | 5.312 |
| 27.58173309 | 7.911455726 | -2.269335394 | 4.821 |
| 25.90378351 | 9.964431729 | -0.21635939  | 1.162 |
| 25.70735303 | 9.604431729 | -0.57635939  | 1.491 |
| 27.26014673 | 7.74735748  | -2.433433639 | 5.402 |
| 27.38513831 | 7.82735748  | -2.353433639 | 5.110 |
| 26.53845512 | 9.054385508 | -1.126405611 | 2.183 |
| 26.55277387 | 8.404385508 | -1.776405611 | 3.426 |
| 27.2282684  | 8.483065978 | -1.697725141 | 3.244 |
| 27.24559964 | 8.573065978 | -1.607725141 | 3.048 |
| 27.75492749 | 8.117437915 | -2.063353204 | 4.180 |
| 27.71019668 | 8.167437915 | -2.013353204 | 4.037 |
| 25.93431318 | 9.641948146 | -0.538842974 | 1.453 |
| 26.36179053 | 9.931948146 | -0.248842974 | 1.188 |
| 25.7540657  | 9.552441911 | -0.628349209 | 1.546 |
| 25.94105048 | 9.152441911 | -1.028349209 | 2.040 |
| 28.82596746 | 7.76649103  | -2.414300089 | 5.331 |
| 28.72480287 | 7.084614834 | -3.096176285 | 8.551 |
| 23.5215582  | 11.30974992 | 1.128958804  | 0.457 |
| 23.43894196 | 12.19974992 | 2.018958804  | 0.247 |
| 24.69753024 | 11.25971771 | 1.078926593  | 0.473 |
| 24.04303433 | 11.70971771 | 1.528926593  | 0.347 |
| 24.69510883 | 12.15082377 | 1.970032648  | 0.255 |
| 24.40324364 | 11.73082377 | 1.550032648  | 0.342 |
| 24.15623729 | 11.1582998  | 0.977508678  | 0.508 |
| 24.12716312 | 11.3682998  | 1.187508678  | 0.439 |
| 24.63433376 | 11.06336531 | 0.882574189  | 0.542 |
| 24.23893562 | 10.98336531 | 0.802574189  | 0.573 |
| 26.48676651 | 10.48123642 | 0.300445302  | 0.812 |
| 26.03076065 | 9.661236422 | -0.519554698 | 1.434 |
| 25.03187967 | 8.388691316 | -1.792099803 | 3.463 |
| 25.01073769 | 8.138691316 | -2.042099803 | 4.118 |

|             |             |              |        |
|-------------|-------------|--------------|--------|
| 25.8208927  | 7.173642212 | -3.007148907 | 8.040  |
| 25.81182287 | 7.543642212 | -2.637148907 | 6.221  |
| 25.04593779 | 8.608540817 | -1.572250302 | 2.974  |
| 24.93698057 | 8.278540817 | -1.902250302 | 3.738  |
| 25.66970978 | 7.6126774   | -2.56811372  | 5.930  |
| 25.74493542 | 7.4226774   | -2.75811372  | 6.765  |
| 26.01042676 | 7.157377335 | -3.023413785 | 8.131  |
| 25.97481857 | 6.817377335 | -3.363413785 | 10.292 |
| 27.80531784 | 5.457517723 | -4.723273396 | 26.415 |
| 27.73964672 | 5.547517723 | -4.633273396 | 24.817 |
| 28.03173202 | 5.071885239 | -5.108905881 | 34.509 |
| 28.0844975  | 5.021885239 | -5.158905881 | 35.726 |
| 27.31611246 | 5.825159741 | -4.355631378 | 20.473 |
| 27.31356806 | 5.865159741 | -4.315631378 | 19.913 |
| 27.79120724 | 5.287014008 | -4.893777112 | 29.729 |
| 27.89476474 | 5.667014008 | -4.513777112 | 22.845 |
| 27.55712431 | 5.389132303 | -4.791658816 | 27.697 |
| 27.54461109 | 5.219132303 | -4.961658816 | 31.161 |

|                      |  |  | <b>PLOT</b>  |
|----------------------|--|--|--|
| <b>MED GEOM 2 HK</b> | <b><math>\Delta</math>CT mir29a 5p</b> | <b><math>\Delta\Delta</math>CT mir29a 5p</b> | <b><math>2^{-(\Delta\Delta</math>CT mir29a 5p)</b> |
| 28.20290411          | 5.69962717                             | -3.916382421                                 | 15.09901384  |
| 28.09784155          | 5.71962717                             | -3.896382421                                 | 14.89114125  |
| 27.08300574          | 6.65815639                             | -3.163452276                                 | 8.959711482  |
| 27.44068148          | 6.37815639                             | -3.443452276                                 | 10.87883585  |
| 27.16663027          | 6.96395923                             | -3.041174563                                 | 8.231609607  |
| 26.78545127          | 7.07395923                             | -2.931174563                                 | 7.627311192  |
| 28.91164644          | 4.430326599                            | -5.75046452                                  | 53.83470153  |
| 28.80770036          | 4.360326599                            | -5.82046452                                  | 56.51118435  |
| 28.3368735           | 5.133456939                            | -5.04733418                                  | 33.06731911  |
| 28.27621262          | 4.743456939                            | -5.43733418                                  | 43.33119684  |
| 27.79561836          | 5.01967038                             | -5.161120739                                 | 35.78097362  |
| 27.82504088          | 5.26967038                             | -4.911120739                                 | 30.08809245  |
| 28.12398443          | 5.06855567                             | -5.112235449                                 | 34.58885734  |
| 28.19890423          | 5.02855567                             | -5.152235449                                 | 35.56128248  |

Rep= replicate  
Below each sample

OK

RAW DATA

**LOG BASE 2**

LOG2 EXPRESSION

0.107084349  
-1.122915651  
1.159518569  
-0.060481431  
-0.37324627  
-2.63324627  
0.560244456  
0.770244456  
1.2283243  
0.9183243  
0.555848829  
0.405848829  
-0.779488667  
-0.799488667  
-0.144870096  
0.025129904  
1.115703145  
0.045703145  
0.756072394  
0.706072394  
-0.936074469  
-1.506074469  
-0.849321927  
-0.849321927  
-1.549903808  
-0.379903808  
0.914228381  
0.524228381  
-1.998575023  
-1.358575023  
0.086550794  
0.086550794  
2.787905044  
2.587905044  
2.23708843  
1.81708843  
0.206813054  
0.056813054  
1.583973426  
1.813973426

**MEAN NORMO**

**1.399**

|     |              |    |
|-----|--------------|----|
| 0.5 | -0.301029996 | -1 |
| 1   | 0            | 0  |
| 2   | 0.301029996  | 1  |

-0.254478001  
0.335521999  
0.453623329  
0.533623329  
2.068228011  
2.978228011  
0.104722886  
0.134722886  
0.682910878  
1.152910878  
0.141553337  
0.061553337  
1.616558699  
1.676558699  
2.054834721  
2.414834721  
2.409335394  
2.269335394  
0.21635939  
0.57635939  
2.433433639  
2.353433639  
1.126405611  
1.776405611  
1.697725141  
1.607725141  
2.063353204  
2.013353204  
0.538842974  
0.248842974  
0.628349209  
1.028349209  
2.414300089  
3.096176285  
-1.128958804  
-2.018958804  
-1.078926593  
-1.528926593  
-1.970032648  
-1.550032648  
-0.977508678  
-1.187508678  
-0.882574189  
-0.802574189  
-0.300445302  
0.519554698  
1.792099803  
2.042099803

**MEAN BAJO**  
**3.034**

3.007148907  
2.637148907  
1.572250302  
1.902250302  
2.56811372  
2.75811372  
3.023413785  
3.363413785  
4.723273396  
4.633273396  
5.108905881  
5.158905881  
4.355631378  
4.315631378  
4.893777112  
4.513777112  
4.791658816  
4.961658816

MACRO/NORMO  
7.580552261  
MACRO/BAJO  
3.495604838

**MEAN MACRO**  
**10.606**

**LOG BASE 2**

**LOG2 EXPRESSION**

3.916382421  
3.896382421  
3.163452276  
3.443452276  
3.041174563  
2.931174563  
  
5.75046452  
5.82046452  
5.04733418  
5.43733418  
5.161120739  
4.911120739  
5.112235449  
5.152235449

RELATIVE QUANTIFICATION OF GENE EXPRESSION OF miRNAs USING LIGHTCYCLER (ROCHE)  
 miRNA EXPRESSION IN NEONATAL SCREENING CARDS  
 NEW MIRNAS

| qPCR<br>Experiment | Duplicate per type<br>of sample<br>BIRTH WEIGHT | 2 miRNAs REFERENCIA (HK)<br>Specific Cp for each gene per capillary |         |
|--------------------|---|---|---------|
|                    |   | mir16-5p  | mir106a |
|                    | <b>Normal M1</b>                                | 23.28   | 28.11   |
|                    | <b>M1 Rep</b>                                   | 23.32   | 28.04   |
|                    | <b>M2</b>                                       | 24.64   | 28.97   |
|                    | <b>M2</b>                                       | 24.73   | 29      |
|                    | <b>M3</b>                                       | 23.12   | 27.19   |
|                    | <b>M3</b>                                       | 23.11   | 27.26   |
|                    | <b>M4</b>                                       | 23.29   | 27.87   |
|                    | <b>M4</b>                                       | 23.23   | 27.82   |
|                    | <b>M5</b>                                       | 24  | 28.29   |
|                    | <b>M5</b>                                       | 23.98   | 28.36   |
|                    | <b>M6</b>                                       | 24.18   | 28.38   |
|                    | <b>M6</b>                                       | 24.1  | 28.34   |
|                    | <b>M7</b>                                       | 22.78   | 27.19   |
|                    | <b>M7</b>                                       | 22.74   | 27.16   |
|                    | <b>M8</b>                                       | 23.92   | 28.12   |
|                    | <b>M8</b>                                       | 23.92   | 28.16   |
|                    | <b>M9</b>                                       | 24.75   | 28.8    |
|                    | <b>M9</b>                                       | 24.76   | 28.86   |
|                    | <b>M10</b>                                      | 24.2  | 29.07   |
|                    | <b>M10</b>                                      | 24.19   | 29.09   |
|                    | <b>Normal M11</b>                               | 22.99   | 28.81   |
|                    | <b>M11</b>                                      | 21.96   | 27.85   |
|                    | <b>M12</b>                                      | 23.16   | 27.67   |
|                    | <b>M12</b>                                      | 22.24   | 28.52   |
|                    | <b>M13</b>                                      | 22.4  | 28.16   |
|                    | <b>M13</b>                                      | 21.79   | 29.29   |
|                    | <b>M14</b>                                      | 22.8  | 31.39   |
|                    | <b>M14</b>                                      | 22.27   | 31.95   |
|                    | <b>M16</b>                                      | 23.45   | 28.31   |
|                    | <b>M16</b>                                      | 23.21   | 29.86   |
|                    | <b>M17</b>                                      | 24.12   | 30.41   |
|                    | <b>M17</b>                                      | 25.15   | 29.94   |
|                    | <b>M18</b>                                      | 22.82   | 30.03   |
|                    | <b>M18</b>                                      | 23.12   | 30      |
|                    | <b>M19</b>                                      | 25.18   | 29.31   |
|                    | <b>M19</b>                                      | 24.47   | 29.32   |
|                    | <b>Low M32</b>                                  | 22.12   | 25.72   |
|                    | <b>M32</b>                                      | 22.08   | 25.74   |
|                    | <b>M33</b>                                      | 23.99   | 27.29   |
|                    | <b>M33</b>                                      | 24.06   | 27.11   |

|                 |       |       |
|-----------------|-------|-------|
| M34             | 21.88 | 25.26 |
| M34             | 21.92 | 25.28 |
| M35             | 22.73 | 26.01 |
| M35             | 22.64 | 25.72 |
| M36             | 23.98 | 28    |
| M36             | 24    | 27.87 |
| M37             | 22.21 | 25.59 |
| M37             | 22.27 | 25.58 |
| M38             | 22.55 | 25.53 |
| M38             | 22.65 | 25.58 |
| M39             | 22.48 | 25.51 |
| M39             | 22.56 | 25.52 |
| M40             | 23.45 | 27.49 |
| M40             | 23.13 | 27.59 |
| Low M41         | 24.05 | 28.69 |
| M41             | 24.07 | 28.65 |
| M42             | 25.99 | 29.47 |
| M42             | 25.92 | 29.35 |
| M43             | 23.38 | 28.7  |
| M43             | 23.27 | 28.4  |
| M44             | 24.87 | 29.88 |
| M44             | 24.94 | 30.07 |
| M45             | 24.48 | 28.77 |
| M45             | 24.43 | 28.86 |
| M46             | 25.14 | 29.49 |
| M46             | 25.07 | 29.61 |
| M47             | 25.34 | 30.4  |
| M47             | 25.3  | 30.35 |
| M48             | 23.37 | 28.78 |
| M48             | 24.13 | 28.8  |
| M49             | 23.33 | 28.43 |
| M49             | 23.67 | 28.43 |
| M50             | 26.04 | 31.91 |
| M50             | 25.89 | 31.87 |
| MAcrosomia M135 | 20.87 | 26.51 |
| M135            | 20.81 | 26.4  |
| M136            | 22.76 | 26.8  |
| M136            | 21.61 | 26.75 |
| M137            | 22.12 | 27.57 |
| M137            | 22.13 | 26.91 |
| M138            | 21.62 | 26.99 |
| M138            | 21.6  | 26.95 |
| M139            | 22.36 | 27.14 |
| M139            | 21.64 | 27.15 |
| M140            | 23.96 | 29.28 |
| M140            | 23.15 | 29.27 |
| M141            | 22.58 | 27.75 |
| M141            | 22.55 | 27.74 |

|                       |       |       |
|-----------------------|-------|-------|
| M142                  | 23.03 | 28.95 |
| M142                  | 22.99 | 28.98 |
| M143                  | 22.3  | 28.13 |
| M143                  | 22.13 | 28.1  |
| M144                  | 23.08 | 28.55 |
| M144                  | 22.99 | 28.83 |
| <b>Macrosomia M88</b> | 25.72 | 31.22 |
| M88                   | 25.61 | 31.22 |
| M89                   | 25.24 | 30.61 |
| M89                   | 25.31 | 30.59 |
| M90                   | 25.57 | 32.69 |
| M90                   | 25.48 | 32.57 |
| M145                  | 25.07 | 31.55 |
| M145                  | 25.14 | 31.63 |
| M146                  | 23.73 | 28.51 |
| M146                  | 23.69 | 28.48 |
| M147                  | 24.63 | 31.39 |
| M147                  | 24.6  | 31.28 |
| M148                  | 24.71 | 31.8  |
| M148                  | 24.85 | 31.74 |
| M149                  | 24.07 | 31    |
| M149                  | 24.05 | 31.02 |
| M150                  | 24.66 | 31.32 |
| M150                  | 24.71 | 31.49 |
| M151                  | 24.41 | 31.11 |
| M151                  | 24.38 | 31.12 |

| REL EXP | EXAMPLE<br>LOG BASE 10 | LOG BASE 2 |
|---------|------------------------|------------|
| 0.5     | -0.301029996           | -1         |
| 1       | 0                      | 0          |
| 2       | 0.301029996            | 1          |

M50 NOT  
PREVIOUS MIRNAS

|              |         |       |       |
|--------------|---------|-------|-------|
|              | M15     | 21.05 | 27.74 |
|              | M15     | 22.34 | 28.69 |
| RE-PERFORMED | Low M31 | 24.34 | 27.3  |
|              | M31     | 24.2  | 27.24 |

NOT INCLUDED:

|  |     |       |       |
|--|-----|-------|-------|
|  | M20 | 26.54 | 29.97 |
|  | M20 | 26.29 | 30.03 |



NBW  
LBW  
HBW

| TARGET   | CALIBRATOR:<br>NBW 1 |                     |                           |                                 |
|----------|----------------------|---------------------|---------------------------|---------------------------------|
| miR-320a | MED GEOM 2 HK        | $\Delta$ CT mir320a | $\Delta\Delta$ CT mir320a | $2^{-\Delta(\Delta$ CT mir320a) |
| 23.66    | 25.58125876          | -1.916293229        | -0.010804257              | 1.008                           |
| 23.08    | 25.57132769          | -2.496293229        | -0.590804257              | 1.506                           |
| 24.66    | 26.71742503          | -2.088727449        | -0.183238477              | 1.135                           |
| 24.49    | 26.78002987          | -2.258727449        | -0.353238477              | 1.277                           |
| 23.09    | 25.07255073          | -1.995962611        | -0.090473639              | 1.065                           |
| 23.05    | 25.09937449          | -2.035962611        | -0.130473639              | 1.095                           |
| 24.36    | 25.47728989          | -1.089453336        | 0.816035635               | 0.568                           |
| 24.36    | 25.42161679          | -1.089453336        | 0.816035635               | 0.568                           |
| 25.63    | 26.0568609           | -0.43753318         | 1.467955792               | 0.361                           |
| 25.36    | 26.07820546          | -0.70753318         | 1.197955792               | 0.436                           |
| 25.18    | 26.19596152          | -0.98505771         | 0.920431262               | 0.528                           |
| 25.24    | 26.1341539           | -0.92505771         | 0.980431262               | 0.507                           |
| 22.91    | 24.88751092          | -1.959720213        | -0.054231242              | 1.038                           |
| 23.55    | 24.8519295           | -1.319720213        | 0.585768758               | 0.666                           |
| 24.22    | 25.93511905          | -1.724338785        | 0.181150187               | 0.882                           |
| 24       | 25.95355852          | -1.944338785        | -0.038849813              | 1.027                           |
| 24.57    | 26.69831455          | -2.144912025        | -0.239423054              | 1.181                           |
| 24.63    | 26.7315095           | -2.084912025        | -0.179423054              | 1.132                           |
| 24.87    | 26.52346131          | -1.655281274        | 0.250207697               | 0.841                           |
| 24.73    | 26.52710124          | -1.795281274        | 0.110207697               | 0.926                           |
| 24.1     | 25.73600396          | -1.133134411        | 0.772354561               | 0.585                           |
| 24.12    | 24.73026486          | -1.113134411        | 0.792354561               | 0.577                           |
| 23.79    | 25.31476249          | -1.459886954        | 0.445602018               | 0.734                           |
| 23.54    | 25.18501142          | -1.709886954        | 0.195602018               | 0.873                           |
| 23.54    | 25.11541359          | -1.649305073        | 0.256183899               | 0.837                           |
| 23.57    | 25.26319655          | -1.619305073        | 0.286183899               | 0.820                           |
| 23.7     | 26.75242045          | -3.013437261        | -1.107948289              | 2.155                           |
| 23.61    | 26.67445407          | -3.103437261        | -1.197948289              | 2.294                           |
| 23.71    | 25.76566514          | -2.335759675        | -0.430270703              | 1.347                           |
| 23.67    | 26.32585421          | -2.375759675        | -0.470270703              | 1.385                           |
| 25.13    | 27.08300574          | -2.13184361         | -0.226354638              | 1.170                           |
| 24.79    | 27.44068148          | -2.47184361         | -0.566354638              | 1.481                           |
| 24       | 26.1779411           | -2.257113925        | -0.351624953              | 1.276                           |
| 24.02    | 26.33628675          | -2.237113925        | -0.331624953              | 1.258                           |
| 23.23    | 27.16663027          | -3.74604077         | -1.840551799              | 3.581                           |
| 23.39    | 26.78545127          | -3.58604077         | -1.680551799              | 3.206                           |
| 23.59    | 23.8521781           | -0.256021935        | 1.649467037               | 0.319                           |
| 23.31    | 23.83986577          | -0.536021935        | 1.369467037               | 0.387                           |
| 24.84    | 25.58685405          | -0.723182307        | 1.182306665               | 0.441                           |
| 24.78    | 25.53951057          | -0.783182307        | 1.122306665               | 0.459                           |

|       |             |              |              |       |
|-------|-------------|--------------|--------------|-------|
| 23.08 | 23.50933432 | -0.444730879 | 1.460758092  | 0.363 |
| 23.08 | 23.54012744 | -0.444730879 | 1.460758092  | 0.363 |
| 24.23 | 24.31475478 | 0.007167791  | 1.912656763  | 0.266 |
| 23.98 | 24.13090964 | -0.242832209 | 1.662656763  | 0.316 |
| 25.48 | 25.91215931 | -0.407436891 | 1.498052081  | 0.354 |
| 25.62 | 25.86271447 | -0.267436891 | 1.638052081  | 0.321 |
| 24.33 | 23.84017408 | 0.476068233  | 2.381557205  | 0.192 |
| 23.93 | 23.86768946 | 0.076068233  | 1.981557205  | 0.253 |
| 23.82 | 23.99378044 | -0.212119759 | 1.693369213  | 0.309 |
| 23.77 | 24.07045907 | -0.262119759 | 1.643369213  | 0.320 |
| 23.2  | 23.94712509 | -0.770762217 | 1.134726754  | 0.455 |
| 23.18 | 23.99439935 | -0.790762217 | 1.114726754  | 0.462 |
| 24.21 | 25.38977156 | -1.115767579 | 0.789721392  | 0.578 |
| 24.62 | 25.2617636  | -0.705767579 | 1.199721392  | 0.435 |
| 24.23 | 26.26774638 | -2.034043601 | -0.128554629 | 1.093 |
| 24.02 | 26.26034082 | -2.244043601 | -0.338554629 | 1.264 |
| 24.75 | 27.67535546 | -2.878544274 | -0.973055302 | 1.963 |
| 24.9  | 27.58173309 | -2.728544274 | -0.823055302 | 1.769 |
| 23.25 | 25.90378351 | -2.555568271 | -0.650079299 | 1.569 |
| 23.41 | 25.70735303 | -2.395568271 | -0.490079299 | 1.405 |
| 24.39 | 27.26014673 | -2.93264252  | -1.027153548 | 2.038 |
| 24.64 | 27.38513831 | -2.68264252  | -0.777153548 | 1.714 |
| 24.48 | 26.53845512 | -2.065614492 | -0.16012552  | 1.117 |
| 24.13 | 26.55277387 | -2.415614492 | -0.51012552  | 1.424 |
| 24.1  | 27.2282684  | -3.136934022 | -1.23144505  | 2.348 |
| 24.15 | 27.24559964 | -3.086934022 | -1.18144505  | 2.268 |
| 24.29 | 27.75492749 | -3.442562085 | -1.537073113 | 2.902 |
| 24.4  | 27.71019668 | -3.332562085 | -1.427073113 | 2.689 |
| 23.16 | 25.93431318 | -2.988051854 | -1.082562883 | 2.118 |
| 23.38 | 26.36179053 | -2.768051854 | -0.862562883 | 1.818 |
| 23.19 | 25.7540657  | -2.657558089 | -0.752069117 | 1.684 |
| 23.01 | 25.94105048 | -2.837558089 | -0.932069117 | 1.908 |
| 25.91 | 28.82596746 | -1.47350897  | 0.431980002  | 0.741 |
| 25.51 | 28.72480287 | -3.265385166 | -1.359896194 | 2.567 |
| 23.48 | 23.5215582  | -0.000250076 | 1.905238896  | 0.267 |
| 23.76 | 23.43894196 | 0.279749924  | 2.185238896  | 0.220 |
| 24.03 | 24.69753024 | -0.340282288 | 1.565206684  | 0.338 |
| 24.16 | 24.04303433 | -0.210282288 | 1.695206684  | 0.309 |
| 24.95 | 24.69510883 | 0.400823768  | 2.30631274   | 0.202 |
| 25    | 24.40324364 | 0.450823768  | 2.35631274   | 0.195 |
| 25.47 | 24.15623729 | 1.328299797  | 3.233788769  | 0.106 |
| 25.58 | 24.12716312 | 1.438299797  | 3.343788769  | 0.098 |
| 25.37 | 24.63433376 | 0.933365308  | 2.83885428   | 0.140 |
| 25.05 | 24.23893562 | 0.613365308  | 2.51885428   | 0.174 |
| 27.03 | 26.48676651 | 0.771236422  | 2.676725393  | 0.156 |
| 26.27 | 26.03076065 | 0.011236422  | 1.916725393  | 0.265 |
| 25.28 | 25.03187967 | 0.258691316  | 2.164180288  | 0.223 |
| 24.9  | 25.01073769 | -0.121308684 | 1.784180288  | 0.290 |

|       |             |              |              |       |
|-------|-------------|--------------|--------------|-------|
| 28.1  | 25.8208927  | 2.283642212  | 4.189131184  | 0.055 |
| 28.11 | 25.81182287 | 2.293642212  | 4.199131184  | 0.054 |
| 25.17 | 25.04593779 | 0.178540817  | 2.084029789  | 0.236 |
| 24.95 | 24.93698057 | -0.041459183 | 1.864029789  | 0.275 |
| 24.73 | 25.66970978 | -0.9773226   | 0.928166372  | 0.526 |
| 24.52 | 25.74493542 | -1.1873226   | 0.718166372  | 0.608 |
| 25.75 | 28.3368735  | -2.556543061 | -0.651054089 | 1.570 |
| 26.12 | 28.27621262 | -2.186543061 | -0.281054089 | 1.215 |
| 24.68 | 27.79561836 | -3.13032962  | -1.224840648 | 2.337 |
| 24.55 | 27.82504088 | -3.26032962  | -1.354840648 | 2.558 |
| 25.58 | 28.91164644 | -3.279673401 | -1.374184429 | 2.592 |
| 25.23 | 28.80770036 | -3.629673401 | -1.724184429 | 3.304 |
| 24.7  | 28.12398443 | -3.46144433  | -1.555955358 | 2.940 |
| 24.87 | 28.19890423 | -3.29144433  | -1.385955358 | 2.613 |
| 24.14 | 26.01042676 | -1.852622665 | 0.052866307  | 0.964 |
| 24.27 | 25.97481857 | -1.722622665 | 0.182866307  | 0.881 |
| 25.07 | 27.80531784 | -2.702482277 | -0.796993305 | 1.737 |
| 25.01 | 27.73964672 | -2.762482277 | -0.856993305 | 1.811 |
| 24.82 | 28.03173202 | -3.238114761 | -1.332625789 | 2.519 |
| 24.79 | 28.0844975  | -3.268114761 | -1.362625789 | 2.572 |
| 23.9  | 27.31611246 | -3.414840259 | -1.509351287 | 2.847 |
| 23.84 | 27.31356806 | -3.474840259 | -1.569351287 | 2.968 |
| 24.85 | 27.79120724 | -2.992985992 | -1.08749702  | 2.125 |
| 24.79 | 27.89476474 | -3.052985992 | -1.14749702  | 2.215 |
| 24.34 | 27.55712431 | -3.210867697 | -1.305378725 | 2.471 |
| 24.47 | 27.54461109 | -3.080867697 | -1.175378725 | 2.259 |

|       |             |              |              |             |
|-------|-------------|--------------|--------------|-------------|
|       | 24.16458152 | -24.74063386 | -22.80201691 | 7312923.873 |
|       | 25.3166862  | -24.74063386 | -22.80201691 | 7312923.873 |
| 28.56 | 25.77754837 | 2.833702689  | 4.772319634  | 0.037       |
| 28.72 | 25.67504625 | 2.993702689  | 4.932319634  | 0.033       |

|       |             |             |              |       |
|-------|-------------|-------------|--------------|-------|
| 24.11 | 28.20290411 | -4.04037283 | -2.134883858 | 4.392 |
| 24.34 | 28.09784155 | -3.81037283 | -1.904883858 | 3.745 |

OK

Rep= replicate  
below each sample label

qPCR

**FINAL FOR PLOTS**

**LOG BASE 2**

LOG2 EXPRESSION  
0.010804257  
0.590804257  
0.183238477  
0.353238477  
0.090473639  
0.130473639  
-0.816035635  
-0.816035635  
-1.467955792  
-1.197955792  
-0.920431262  
-0.980431262  
0.054231242  
-0.585768758  
-0.181150187  
0.038849813  
0.239423054  
0.179423054  
-0.250207697  
-0.110207697  
-0.772354561  
-0.792354561  
-0.445602018  
-0.195602018  
-0.256183899  
-0.286183899  
1.107948289  
1.197948289  
0.430270703  
0.470270703  
0.226354638  
0.566354638  
0.351624953  
0.331624953  
1.840551799  
1.680551799  
-1.649467037  
-1.369467037  
-1.182306665  
-1.122306665

**MEAN NORMAL**  
**1.148**

-1.460758092  
-1.460758092  
-1.912656763  
-1.662656763  
-1.498052081  
-1.638052081  
-2.381557205  
-1.981557205  
-1.693369213  
-1.643369213  
-1.134726754  
-1.114726754  
-0.789721392  
-1.199721392  
0.128554629  
0.338554629  
0.973055302  
0.823055302  
0.650079299  
0.490079299  
1.027153548  
0.777153548  
0.16012552  
0.51012552  
1.23144505  
1.18144505  
1.537073113  
1.427073113  
1.082562883  
0.862562883  
0.752069117  
0.932069117

**MEAN LOW**  
**1.131**

-1.905238896  
-2.185238896  
-1.565206684  
-1.695206684  
-2.30631274  
-2.35631274  
-3.233788769  
-3.343788769  
-2.83885428  
-2.51885428  
-2.676725393  
-1.916725393  
-2.164180288  
-1.784180288

-4.189131184  
-4.199131184  
-2.084029789  
-1.864029789  
-0.928166372  
-0.718166372  
0.651054089  
0.281054089  
1.224840648  
1.354840648  
1.374184429  
1.724184429  
1.555955358  
1.385955358  
-0.052866307  
-0.182866307  
0.796993305  
0.856993305  
1.332625789  
1.362625789  
1.509351287  
1.569351287  
1.08749702  
1.14749702  
1.305378725  
1.175378725

**MEAN MACRO**  
**1.231**

22.80201691  
22.80201691  
-4.772319634  
-4.932319634

RELATIVE QUANTIFICATION OF GENE EXPRESSION OF miRNAs USING LIGHTCYCLER (ROCHE)  
miRNA EXPRESSION IN NEONATAL SCREENING CARDS  
NEW MIRNAS

| qPCR<br>Experiment | Duplicate of<br>type of sample<br>BIRTH WEIGHT | 2 miRNAs REFERENCE (HK)<br>Specific Cp for each gene per capillary |         | TARGET    |
|--------------------|--|--|---------|-----------|
|                    |  | mir16-5p   | mir106a | mir221-3p |
|                    | <b>Normal M1</b>                               | 23.28  | 28.11   | 37.07     |
|                    | <b>M1 Rep</b>                                  | 23.32  | 28.04   | 36.22     |
|                    | <b>M2</b>                                      | 24.64  | 28.97   | 39.05     |
|                    | <b>M2</b>                                      | 24.73  | 29      | 37.87     |
|                    | <b>M3</b>                                      | 23.12  | 27.19   | 37.66     |
|                    | <b>M3</b>                                      | 23.11  | 27.26   | 38.63     |
|                    | <b>M4</b>                                      | 23.29  | 27.87   | 37.84     |
|                    | <b>M4</b>                                      | 23.23  | 27.82   | 36.91     |
|                    | <b>M5</b>                                      | 24   | 28.29   | 38.02     |
|                    | <b>M5</b>                                      | 23.98  | 28.36   | 38.02     |
|                    | <b>M6</b>                                      | 24.18  | 28.38   | 35.25     |
|                    | <b>M6</b>                                      | 24.1   | 28.34   | 35.25     |
|                    | <b>M7</b>                                      | 22.78  | 27.19   | 37.13     |
|                    | <b>M7</b>                                      | 22.74  | 27.16   | 38.18     |
|                    | <b>M8</b>                                      | 23.92  | 28.12   | 40.51     |
|                    | <b>M8</b>                                      | 23.92  | 28.16   | 39.14     |
|                    | <b>M9</b>                                      | 24.75  | 28.8    | 37.24     |
|                    | <b>M9</b>                                      | 24.76  | 28.86   | 37.35     |
|                    | <b>M10</b>                                     | 24.2   | 29.07   | 38.05     |
|                    | <b>M10</b>                                     | 24.19  | 29.09   | 37.09     |
|                    | <b>Normal M11</b>                              | 22.99  | 28.81   | 37.67     |
|                    | <b>M11</b>                                     | 21.96  | 27.85   | 36.58     |
|                    | <b>M12</b>                                     | 23.16  | 27.67   | 36.5      |
|                    | <b>M12</b>                                     | 22.24  | 28.52   | 36.54     |
|                    | <b>M13</b>                                     | 22.4   | 28.16   | 37.78     |
|                    | <b>M13</b>                                     | 21.79  | 29.29   | 37.78     |
|                    | <b>M14</b>                                     | 22.8   | 31.39   | 38.86     |
|                    | <b>M14</b>                                     | 22.27  | 31.95   | 38.86     |
|                    | <b>M15</b>                                     | 21.05  | 27.74   | 38.38     |
|                    | <b>M15</b>                                     | 22.34  | 28.69   | 37.57     |
|                    | <b>M16</b>                                     | 23.45  | 28.31   | 35.43     |
|                    | <b>M16</b>                                     | 23.21  | 29.86   | 37.49     |
|                    | <b>M17</b>                                     | 24.12  | 30.41   | 35.78     |
|                    | <b>M17</b>                                     | 25.15  | 29.94   | 36.13     |
|                    | <b>M18</b>                                     | 22.82  | 30.03   | 36.21     |
|                    | <b>M18</b>                                     | 23.12  | 30      | 36.21     |
|                    | <b>M19</b>                                     | 25.18  | 29.31   | 37.08     |
|                    | <b>M19</b>                                     | 24.47  | 29.32   | 35.83     |
|                    | <b>Low M31</b>                                 | 24.34  | 27.3    | 39.72     |
|                    | <b>M31</b>                                     | 24.2   | 27.24   | 39.72     |

|           |       |       |       |
|-----------|-------|-------|-------|
| M32       | 22.12 | 25.72 | 37.11 |
| M32       | 22.08 | 25.74 | 36.36 |
| M33       | 23.99 | 27.29 | 35.99 |
| M33       | 24.06 | 27.11 | 35.99 |
| M34       | 21.88 | 25.26 | 38.98 |
| M34       | 21.92 | 25.28 | 38.98 |
| M35       | 22.73 | 26.01 | 37.96 |
| M35       | 22.64 | 25.72 | 37.96 |
| M36       | 23.98 | 28    | 35.61 |
| M36       | 24    | 27.87 | 35.96 |
| M37       | 22.21 | 25.59 | 36.33 |
| M37       | 22.27 | 25.58 | 35.85 |
| M38       | 22.55 | 25.53 | 35.99 |
| M38       | 22.65 | 25.58 | 35.43 |
| M39       | 22.48 | 25.51 | 36.42 |
| M39       | 22.56 | 25.52 | 36.34 |
| M40       | 23.45 | 27.49 | 37.54 |
| M40       | 23.13 | 27.59 | 35.87 |
| Low M41   | 24.05 | 28.69 | 35.99 |
| M41       | 24.07 | 28.65 | 35.36 |
| M42       | 25.99 | 29.47 | 37.94 |
| M42       | 25.92 | 29.35 | 38.22 |
| M43       | 23.38 | 28.7  | 37.87 |
| M43       | 23.27 | 28.4  | 38.84 |
| M44       | 24.87 | 29.88 | 36.1  |
| M44       | 24.94 | 30.07 | 37.6  |
| M45       | 24.48 | 28.77 | 36.81 |
| M45       | 24.43 | 28.86 | 39.18 |
| M46       | 25.14 | 29.49 | 37.58 |
| M46       | 25.07 | 29.61 | 37.9  |
| M47       | 25.34 | 30.4  | 37.74 |
| M47       | 25.3  | 30.35 | 39.92 |
| M48       | 23.37 | 28.78 | 38.59 |
| M48       | 24.13 | 28.8  | 37.49 |
| M49       | 23.33 | 28.43 | 37.95 |
| M49       | 23.67 | 28.43 | 37.95 |
| M50       | 26.04 | 31.91 | 38.02 |
| M50       | 25.89 | 31.87 | 38.29 |
| High M135 | 20.87 | 26.51 | 38.1  |
| M135      | 20.81 | 26.4  | 38.1  |
| M136      | 22.76 | 26.8  | 38.78 |
| M136      | 21.61 | 26.75 | 39.3  |
| M137      | 22.12 | 27.57 | 37.63 |
| M137      | 22.13 | 26.91 | 37.63 |
| M138      | 21.62 | 26.99 | 36.14 |
| M138      | 21.6  | 26.95 | 38.58 |
| M139      | 22.36 | 27.14 | 35.5  |
| M139      | 21.64 | 27.15 | 35.5  |



|                 |       |       |       |
|-----------------|-------|-------|-------|
| <b>M141</b>     | 22.58 | 27.75 | 33.04 |
| <b>M141</b>     | 22.55 | 27.74 | 33.04 |
| <b>M143</b>     | 22.3  | 28.13 | 35.44 |
| <b>M143</b>     | 22.13 | 28.1  | 35.44 |
| <b>M144</b>     | 23.08 | 28.55 | 38.14 |
| <b>M144</b>     | 22.99 | 28.83 | 38.14 |
| <b>High M88</b> | 25.72 | 31.22 | 34.76 |
| <b>M88</b>      | 25.61 | 31.22 | 34.55 |
| <b>M89</b>      | 25.24 | 30.61 | 36.71 |
| <b>M89</b>      | 25.31 | 30.59 | 36.99 |
| <b>M145</b>     | 25.07 | 31.55 | 36.98 |
| <b>M145</b>     | 25.14 | 31.63 | 36.43 |
| <b>M146</b>     | 23.73 | 28.51 | 35.04 |
| <b>M146</b>     | 23.69 | 28.48 | 33.2  |
| <b>M147</b>     | 24.63 | 31.39 | 35.26 |
| <b>M147</b>     | 24.6  | 31.28 | 35.26 |
| <b>M148</b>     | 24.71 | 31.8  | 37.46 |
| <b>M148</b>     | 24.85 | 31.74 | 37.46 |
| <b>M149</b>     | 24.07 | 31    | 37.7  |
| <b>M149</b>     | 24.05 | 31.02 | 37.7  |
| <b>M150</b>     | 24.66 | 31.32 | 37.09 |
| <b>M150</b>     | 24.71 | 31.49 | 37.09 |

| REL EXP | EXAMPLE<br>LOG BASE 10 | LOG BASE 2 |
|---------|------------------------|------------|
| 0.5     | -0.301029996           | -1         |
| 1       | 0                      | 0          |
| 2       | 0.301029996            | 1          |

M50 NO  
PREVIOUS MIRNAS

**NO AMPLIFICATION:**

|             |       |       |
|-------------|-------|-------|
| <b>M140</b> | 23.96 | 29.28 |
| <b>M140</b> | 23.15 | 29.27 |
| <b>M142</b> | 23.03 | 28.95 |
| <b>M142</b> | 22.99 | 28.98 |

**NOT USED FOR FURTHER ANALYSIS, HIGH VARIABILITY:**

|             |       |       |       |
|-------------|-------|-------|-------|
| <b>M20</b>  | 26.54 | 29.97 | 36.64 |
| <b>M20</b>  | 26.29 | 30.03 | 35.22 |
| <b>M151</b> | 24.41 | 31.11 | 31.56 |
| <b>M151</b> | 24.38 | 31.12 | 31.27 |
| <b>M90</b>  | 25.57 | 32.69 | 33.76 |
| <b>M90</b>  | 25.48 | 32.57 | 33.76 |

NBW  
LBW  
HBW

CALIBRATOR:  
NORMAL BW 1

| MED GEOM 2 HK | $\Delta CT$ mir221-3p | $\Delta\Delta CT$ mir221-3p | $2^{-(\Delta\Delta CT \text{ mir221-3p})}$ |
|---------------|-----------------------|-----------------------------|--|
| 25.58125876   | 11.49370677           | 0.084992842                 | 0.943                                      |
| 25.57132769   | 10.64370677           | -0.765007158                | 1.699                                      |
| 26.71742503   | 12.30127255           | 0.892558622                 | 0.539                                      |
| 26.78002987   | 11.12127255           | -0.287441378                | 1.220                                      |
| 25.07255073   | 12.57403739           | 1.16532346                  | 0.446                                      |
| 25.09937449   | 13.54403739           | 2.13532346                  | 0.228                                      |
| 25.47728989   | 12.39054666           | 0.981832735                 | 0.506                                      |
| 25.42161679   | 11.46054666           | 0.051832735                 | 0.965                                      |
| 26.0568609    | 11.95246682           | 0.543752891                 | 0.686                                      |
| 26.07820546   | 11.95246682           | 0.543752891                 | 0.686                                      |
| 26.19596152   | 9.08494229            | -2.323771639                | 5.006                                      |
| 26.1341539    | 9.08494229            | -2.323771639                | 5.006                                      |
| 24.88751092   | 12.26027979           | 0.851565858                 | 0.554                                      |
| 24.8519295    | 13.31027979           | 1.901565858                 | 0.268                                      |
| 25.93511905   | 14.56566121           | 3.156947286                 | 0.112                                      |
| 25.95355852   | 13.19566121           | 1.786947286                 | 0.290                                      |
| 26.69831455   | 10.52508797           | -0.883625954                | 1.845                                      |
| 26.7315095    | 10.63508797           | -0.773625954                | 1.710                                      |
| 26.52346131   | 11.52471873           | 0.116004797                 | 0.923                                      |
| 26.52710124   | 10.56471873           | -0.843995203                | 1.795                                      |
| 25.73600396   | 12.43686559           | 1.02815166                  | 0.490                                      |
| 24.73026486   | 11.34686559           | -0.06184834                 | 1.044                                      |
| 25.31476249   | 11.25011305           | -0.158600882                | 1.116                                      |
| 25.18501142   | 11.29011305           | -0.118600882                | 1.086                                      |
| 25.11541359   | 12.59069493           | 1.181980998                 | 0.441                                      |
| 25.26319655   | 12.59069493           | 1.181980998                 | 0.441                                      |
| 26.75242045   | 12.14656274           | 0.73784881                  | 0.600                                      |
| 26.67445407   | 12.14656274           | 0.73784881                  | 0.600                                      |
| 24.16458152   | 13.63936614           | 2.230652213                 | 0.213                                      |
| 25.3166862    | 12.82936614           | 1.420652213                 | 0.374                                      |
| 25.76566514   | 9.384240325           | -2.024473604                | 4.068                                      |
| 26.32585421   | 11.44424032           | 0.035526396                 | 0.976                                      |
| 27.08300574   | 8.51815639            | -2.890557539                | 7.416                                      |
| 27.44068148   | 8.86815639            | -2.540557539                | 5.818                                      |
| 26.1779411    | 9.952886075           | -1.455827854                | 2.743                                      |
| 26.33628675   | 9.952886075           | -1.455827854                | 2.743                                      |
| 27.16663027   | 10.10395923           | -1.304754699                | 2.470                                      |
| 26.78545127   | 8.85395923            | -2.554754699                | 5.876                                      |
| 25.77754837   | 13.99370269           | 2.58498876                  | 0.167                                      |
| 25.67504625   | 13.99370269           | 2.58498876                  | 0.167                                      |

|             |             |              |       |
|-------------|-------------|--------------|-------|
| 23.8521781  | 13.26397807 | 1.855264137  | 0.276 |
| 23.83986577 | 12.51397807 | 1.105264137  | 0.465 |
| 25.58685405 | 10.42681769 | -0.981896236 | 1.975 |
| 25.53951057 | 10.42681769 | -0.981896236 | 1.975 |
| 23.50933432 | 15.45526912 | 4.046555192  | 0.061 |
| 23.54012744 | 15.45526912 | 4.046555192  | 0.061 |
| 24.31475478 | 13.73716779 | 2.328453862  | 0.199 |
| 24.13090964 | 13.73716779 | 2.328453862  | 0.199 |
| 25.91215931 | 9.722563109 | -1.68615082  | 3.218 |
| 25.86271447 | 10.07256311 | -1.33615082  | 2.525 |
| 23.84017408 | 12.47606823 | 1.067354305  | 0.477 |
| 23.86768946 | 11.99606823 | 0.587354305  | 0.666 |
| 23.99378044 | 11.95788024 | 0.549166312  | 0.683 |
| 24.07045907 | 11.39788024 | -0.010833688 | 1.008 |
| 23.94712509 | 12.44923778 | 1.040523854  | 0.486 |
| 23.99439935 | 12.36923778 | 0.960523854  | 0.514 |
| 25.38977156 | 12.21423242 | 0.805518492  | 0.572 |
| 25.2617636  | 10.54423242 | -0.864481508 | 1.821 |
| 26.26774638 | 9.725956399 | -1.68275753  | 3.210 |
| 26.26034082 | 9.095956399 | -2.31275753  | 4.968 |
| 27.67535546 | 10.31145573 | -1.097258203 | 2.139 |
| 27.58173309 | 10.59145573 | -0.817258203 | 1.762 |
| 25.90378351 | 12.06443173 | 0.655717801  | 0.635 |
| 25.70735303 | 13.03443173 | 1.625717801  | 0.324 |
| 27.26014673 | 8.77735748  | -2.631356449 | 6.196 |
| 27.38513831 | 10.27735748 | -1.131356449 | 2.191 |
| 26.53845512 | 10.26438551 | -1.144328421 | 2.210 |
| 26.55277387 | 12.63438551 | 1.225671579  | 0.428 |
| 27.2282684  | 10.34306598 | -1.065647951 | 2.093 |
| 27.24559964 | 10.66306598 | -0.745647951 | 1.677 |
| 27.75492749 | 10.00743792 | -1.401276014 | 2.641 |
| 27.71019668 | 12.18743792 | 0.778723986  | 0.583 |
| 25.93431318 | 12.44194815 | 1.033234217  | 0.489 |
| 26.36179053 | 11.34194815 | -0.066765783 | 1.047 |
| 25.7540657  | 12.10244191 | 0.693727982  | 0.618 |
| 25.94105048 | 12.10244191 | 0.693727982  | 0.618 |
| 28.82596746 | 10.63649103 | -0.772222899 | 1.708 |
| 28.72480287 | 9.514614834 | -1.894099095 | 3.717 |
| 23.5215582  | 14.61974992 | 3.211035995  | 0.108 |
| 23.43894196 | 14.61974992 | 3.211035995  | 0.108 |
| 24.69753024 | 14.40971771 | 3.001003784  | 0.125 |
| 24.04303433 | 14.92971771 | 3.521003784  | 0.087 |
| 24.69510883 | 13.08082377 | 1.672109839  | 0.314 |
| 24.40324364 | 13.08082377 | 1.672109839  | 0.314 |
| 24.15623729 | 11.9982998  | 0.589585869  | 0.665 |
| 24.12716312 | 14.4382998  | 3.029585869  | 0.122 |
| 24.63433376 | 11.06336531 | -0.345348621 | 1.270 |
| 24.23893562 | 11.06336531 | -0.345348621 | 1.270 |

|             |             |              |        |
|-------------|-------------|--------------|--------|
| 25.03187967 | 8.018691316 | -3.390022613 | 10.483 |
| 25.01073769 | 8.018691316 | -3.390022613 | 10.483 |
| 25.04593779 | 10.44854082 | -0.960173112 | 1.946  |
| 24.93698057 | 10.44854082 | -0.960173112 | 1.946  |
| 25.66970978 | 12.4326774  | 1.023963471  | 0.492  |
| 25.74493542 | 12.4326774  | 1.023963471  | 0.492  |
| 28.3368735  | 6.453456939 | -4.95525699  | 31.023 |
| 28.27621262 | 6.243456939 | -5.16525699  | 35.884 |
| 27.79561836 | 8.89967038  | -2.509043549 | 5.692  |
| 27.82504088 | 9.17967038  | -2.229043549 | 4.688  |
| 28.12398443 | 8.81855567  | -2.590158259 | 6.022  |
| 28.19890423 | 8.26855567  | -3.140158259 | 8.816  |
| 26.01042676 | 9.047377335 | -2.361336594 | 5.138  |
| 25.97481857 | 7.207377335 | -4.201336594 | 18.396 |
| 27.80531784 | 7.487517723 | -3.921196206 | 15.149 |
| 27.73964672 | 7.487517723 | -3.921196206 | 15.149 |
| 28.03173202 | 9.401885239 | -2.00682869  | 4.019  |
| 28.0844975  | 9.401885239 | -2.00682869  | 4.019  |
| 27.31611246 | 10.38515974 | -1.023554188 | 2.033  |
| 27.31356806 | 10.38515974 | -1.023554188 | 2.033  |
| 27.79120724 | 9.247014008 | -2.161699921 | 4.474  |
| 27.89476474 | 9.247014008 | -2.161699921 | 4.474  |

|             |              |              |                  |
|-------------|--------------|--------------|------------------|
| 26.48676651 | -26.25876358 | -37.66747751 | 218293392692.909 |
| 26.03076065 | -26.25876358 | -37.66747751 | 218293392692.909 |
| 25.8208927  | -25.81635779 | -37.22507172 | 160643507322.920 |
| 25.81182287 | -25.81635779 | -37.22507172 | 160643507322.920 |

|             |             |              |             |
|-------------|-------------|--------------|-------------|
| 28.20290411 | 8.48962717  | -2.737632421 | 6.669748773 |
| 28.09784155 | 7.06962717  | -4.157632421 | 17.84728133 |
| 27.55712431 | 4.009132303 | -7.399581626 | 168.8480404 |
| 27.54461109 | 3.719132303 | -7.689581626 | 206.440415  |
| 28.91164644 | 4.900326599 | -6.50838733  | 91.0373924  |
| 28.80770036 | 4.900326599 | -6.50838733  | 91.0373924  |

OK

Rep= replicate  
Below the name of each sample

FOR PLOTS

ANALYZED

HIGH VARIABILITY AMONG SAMPLES

**LOG BASE 2**

**LOG2 EXPRESSION**

-0.084992842  
0.765007158  
-0.892558622  
0.287441378  
-1.16532346  
-2.13532346  
-0.981832735  
-0.051832735  
-0.543752891  
-0.543752891  
2.323771639  
2.323771639  
-0.851565858  
-1.901565858  
-3.156947286  
-1.786947286  
0.883625954  
0.773625954  
-0.116004797  
0.843995203  
-1.02815166  
0.06184834  
0.158600882  
0.118600882  
-1.181980998  
-1.181980998  
-0.73784881  
-0.73784881  
-2.230652213  
-1.420652213  
2.024473604  
-0.035526396  
2.890557539  
2.540557539  
1.455827854  
1.455827854  
1.304754699  
2.554754699  
-2.58498876  
-2.58498876

**MEAN NORMAL**

**1.683**

1.863

-1.855264137  
-1.105264137  
0.981896236  
0.981896236  
-4.046555192  
-4.046555192  
-2.328453862  
-2.328453862  
1.68615082  
1.33615082  
-1.067354305  
-0.587354305  
-0.549166312  
0.010833688  
-1.040523854  
-0.960523854  
-0.805518492  
0.864481508  
1.68275753  
2.31275753  
1.097258203  
0.817258203  
-0.655717801  
-1.625717801  
2.631356449  
1.131356449  
1.144328421  
-1.225671579  
1.065647951  
0.745647951  
1.401276014  
-0.778723986  
-1.033234217  
0.066765783  
-0.693727982  
-0.693727982

**MEAN LOW**

**1.351**

**1.375**

-3.211035995  
-3.211035995  
-3.001003784  
-3.521003784  
-1.672109839  
-1.672109839  
-0.589585869  
-3.029585869  
0.345348621  
0.345348621

3.390022613  
3.390022613  
0.960173112  
0.960173112  
-1.023963471  
-1.023963471  
4.95525699  
5.16525699  
2.509043549  
2.229043549  
2.590158259  
3.140158259  
2.361336594  
4.201336594  
3.921196206  
3.921196206  
2.00682869  
2.00682869  
1.023554188  
1.023554188  
2.161699921  
2.161699921

**MEAN MACRO**

**6.164**

8.686223132

37.66747751  
37.66747751  
37.22507172  
37.22507172

2.737632421  
4.157632421

