

Table S1.: Media formulation per 1 liter.

| | Types of media (/L) | | | | |
|-----------------------|---------------------|---------------|--------------|---------------|---------|
| | Mueller-Hinton | Luria Bertani | Actinomycete | Reasoner's 2A | Oatmeal |
| Sodium caseinate | | | 2.0 g | | |
| Asparagine | | | 0.1 g | | |
| Sodium propionate | | | 4.0 g | | |
| Dipotassium phosphate | | | 0.5 g | 0.3 g | |
| Magnesium sulfate | | | 0.1 g | 0.05 g | |
| Ferrous sulfate | | | 0.001 g | | |
| Glycerol | | | 1.0 ml | | |
| Sodium chloride | | 10.0 g | | | |
| Yeast extract | | 5.0 g | | 0.5 g | |
| Beef extract | 2.0g | | | | |
| Proteose peptone | | | | 0.5 g | |
| Casamino acids | | | | 0.5 g | |
| Dextrose | | | | 0.5 g | |
| Soluble starch | 1.5 g | | | 0.5 g | |
| Sodium pyruvate | | | | 0.3 g | |
| Casein hydrolysate | 17.5 g | 10.0 g | | | |
| Oatmeal | | | | | 20.0 g |

S2. Statistical analysis report of One-way ANOVA.

FIGURE 1 (a)

One-way analysis of variance

| | |
|---|----------|
| P value | < 0.0001 |
| P value summary | *** |
| Are means signif. different? (P < 0.05) | Yes |
| Number of groups | 5 |
| F | 5640 |
| R square | 0,9996 |

| ANOVA Table | SS | df | MS |
|-----------------------------|-----------|----|----------|
| Treatment (between columns) | 1,179 | 4 | 0,2948 |
| Residual (within columns) | 0,0005227 | 10 | 5,23E-05 |
| Total | 1,18 | 14 | |

| Tukey's Multiple Comparison Test | Mean Diff. | q | Significant? P < 0.05? | Summary | 95% CI of diff |
|----------------------------------|------------|-------|------------------------|---------|---------------------|
| LB vs OAT | -0,7009 | 167,9 | Yes | *** | -0.7204 to -0.6815 |
| LB vs MH | 0 | 0 | No | ns | -0.01943 to 0.01943 |
| LB vs R2A | 0 | 0 | No | ns | -0.01943 to 0.01943 |
| LB vs ACT | 0 | 0 | No | ns | -0.01943 to 0.01943 |
| OAT vs MH | 0,7009 | 167,9 | Yes | *** | 0.6815 to 0.7204 |
| OAT vs R2A | 0,7009 | 167,9 | Yes | *** | 0.6815 to 0.7204 |
| OAT vs ACT | 0,7009 | 167,9 | Yes | *** | 0.6815 to 0.7204 |
| MH vs R2A | 0 | 0 | No | ns | -0.01943 to 0.01943 |
| MH vs ACT | 0 | 0 | No | ns | -0.01943 to 0.01943 |
| R2A vs ACT | 0 | 0 | No | ns | -0.01943 to 0.01943 |

FIGURE 1 (b)

One-way analysis of variance

| | |
|---|----------|
| P value | < 0.0001 |
| P value summary | *** |
| Are means signif. different? (P < 0.05) | Yes |
| Number of groups | 5 |
| F | 30,15 |
| R squared | 0,9234 |

| ANOVA Table | SS | df | MS |
|-----------------------------|-----------|----|----------------|
| Treatment (between columns) | 3,155E+14 | 4 | 78880000000000 |
| Residual (within columns) | 2,616E+13 | 10 | 2616000000000 |
| Total | 3,417E+14 | 14 | |

| Tukey's Multiple Comparison Test | Mean Diff. | q | Significant? P < 0.05? | Summary | 95% CI of diff |
|----------------------------------|------------|--------|------------------------|---------|-----------------------|
| LB vs OAT | 11880000 | 12,72 | Yes | *** | 7534000 to 16230000 |
| LB vs ACT | 4000000 | 4,283 | No | ns | -346300 to 8346000 |
| LB vs MH | 1467000 | 1,571 | No | ns | -2880000 to 5813000 |
| LB vs R2A | -800000 | 0,8566 | No | ns | -5146000 to 3546000 |
| OAT vs ACT | -7880000 | 8,438 | Yes | ** | -12230000 to -3534000 |
| OAT vs MH | -10410000 | 11,15 | Yes | *** | -14760000 to -6067000 |
| OAT vs R2A | -12680000 | 13,58 | Yes | *** | -17030000 to -8334000 |
| ACT vs MH | -2533000 | 2,713 | No | ns | -6880000 to 1813000 |
| ACT vs R2A | -4800000 | 5,14 | Yes | * | -9146000 to -453700 |
| MH vs R2A | -2267000 | 2,427 | No | ns | -6613000 to 2080000 |

FIGURE 1 (c)

One-way analysis of variance

| | |
|---|----------|
| P value | < 0.0001 |
| P value summary | *** |
| Are means signif. different? (P < 0.05) | Yes |
| Number of groups | 5 |
| F | 1183 |
| R square | 0,9979 |

| ANOVA Table | SS | df | MS |
|-----------------------------|----------|----|-----------|
| Treatment (between columns) | 2,043 | 4 | 0,5108 |
| Residual (within columns) | 0,004317 | 10 | 0,0004317 |
| Total | 2,048 | 14 | |

| Tukey's Multiple Comparison Test | Mean Diff. | q | Significant? P < 0.05? | Summary | 95% CI of diff |
|----------------------------------|------------|-------|------------------------|---------|---------------------|
| LB vs OAT | -0,9386 | 78,25 | Yes | *** | -0.9944 to -0.8828 |
| LB vs MH | 0 | 0 | No | ns | -0.05583 to 0.05583 |
| LB vs R2A | 0 | 0 | No | ns | -0.05583 to 0.05583 |
| LB vs ACT | -0,394 | 32,85 | Yes | *** | -0.4499 to -0.3382 |
| OAT vs MH | 0,9386 | 78,25 | Yes | *** | 0.8828 to 0.9944 |
| OAT vs R2A | 0,9386 | 78,25 | Yes | *** | 0.8828 to 0.9944 |
| OAT vs ACT | 0,5446 | 45,4 | Yes | *** | 0.4888 to 0.6004 |
| MH vs R2A | 0 | 0 | No | ns | -0.05583 to 0.05583 |
| MH vs ACT | -0,394 | 32,85 | Yes | *** | -0.4499 to -0.3382 |
| R2A vs ACT | -0,394 | 32,85 | Yes | *** | -0.4499 to -0.3382 |

FIGURE 1 (d)

One-way analysis of variance

| | |
|---|----------|
| P value | < 0.0001 |
| P value summary | *** |
| Are means signif. different? (P < 0.05) | Yes |
| Number of groups | 5 |
| F | 55,72 |
| R square | 0,9571 |

| ANOVA Table | SS | df | MS |
|-----------------------------|----------|----|----------|
| Treatment (between columns) | 4,26E+14 | 4 | 1,06E+14 |
| Residual (within columns) | 1,91E+13 | 10 | 1,91E+12 |
| Total | 4,45E+14 | 14 | |

| Tukey's Multiple Comparison Test | Mean Diff. | q | Significant? P < 0.05? | Summary | 95% CI of diff |
|----------------------------------|------------|--------|------------------------|---------|----------------------------|
| LB vs OAT | 8,67E+06 | 10,86 | Yes | *** | 4.954e+006 to 1.238e+007 |
| LB vs MH | -400000 | 0,5014 | No | ns | -4.113e+006 to 3.313e+006 |
| LB vs R2A | -8,00E+06 | 10,03 | Yes | *** | -1.171e+007 to -4.287e+006 |
| LB vs ACT | 1,87E+06 | 2,34 | No | ns | -1.846e+006 to 5.580e+006 |
| OAT vs MH | -9,07E+06 | 11,36 | Yes | *** | -1.278e+007 to -5.354e+006 |
| OAT vs R2A | -1,67E+07 | 20,89 | Yes | *** | -2.038e+007 to -1.295e+007 |
| OAT vs ACT | -6,80E+06 | 8,524 | Yes | *** | -1.051e+007 to -3.087e+006 |
| MH vs R2A | -7,60E+06 | 9,527 | Yes | *** | -1.131e+007 to -3.887e+006 |
| MH vs ACT | 2,27E+06 | 2,841 | No | ns | -1.446e+006 to 5.980e+006 |
| R2A vs ACT | 9,87E+06 | 12,37 | Yes | *** | 6.154e+006 to 1.358e+007 |

FIGURE 1 (e)

One-way analysis of variance

| | |
|---|----------|
| P value | < 0.0001 |
| P value summary | *** |
| Are means signif. different? (P < 0.05) | Yes |
| Number of groups | 5 |
| F | 2686 |
| R squared | 0,9991 |

| ANOVA Table | SS | df | MS |
|-----------------------------|---------|----|----------|
| Treatment (between columns) | 3,846 | 4 | 0,9616 |
| Residual (within columns) | 0,00358 | 10 | 0,000358 |
| Total | 3,85 | 14 | |

| Tukey's Multiple Comparison Test | Mean Diff. | q | Significant? P < 0.05? | Summary | 95% CI of diff |
|----------------------------------|------------|-------|------------------------|---------|---------------------|
| LB vs OAT | -1,107 | 101,4 | Yes | *** | -1.158 to -1.057 |
| LB vs MH | 0 | 0 | No | ns | -0.05084 to 0.05084 |
| LB vs R2A | -0,7729 | 70,75 | Yes | *** | -0.8237 to -0.7220 |
| LB vs ACT | -1,124 | 102,9 | Yes | *** | -1.175 to -1.073 |
| OAT vs MH | 1,107 | 101,4 | Yes | *** | 1.057 to 1.158 |
| OAT vs R2A | 0,3346 | 30,63 | Yes | *** | 0.2837 to 0.3854 |
| OAT vs ACT | -0,0167 | 1,529 | No | ns | -0.06754 to 0.03413 |
| MH vs R2A | -0,7729 | 70,75 | Yes | *** | -0.8237 to -0.7220 |
| MH vs ACT | -1,124 | 102,9 | Yes | *** | -1.175 to -1.073 |
| R2A vs ACT | -0,3513 | 32,16 | Yes | *** | -0.4021 to -0.3005 |

FIGURE 1(f)

One-way analysis of variance

| | |
|---|----------|
| P value | < 0.0001 |
| P value summary | *** |
| Are means signif. different? (P < 0.05) | Yes |
| Number of groups | 5 |
| F | 61 |
| R squared | 0,9606 |

| ANOVA Table | SS | df | MS |
|-----------------------------|-----------|----|------------------|
| Treatment (between columns) | 9,026E+15 | 4 | 2256000000000000 |
| Residual (within columns) | 3,699E+14 | 10 | 369900000000000 |
| Total | 9,396E+15 | 14 | |

| Tukey's Multiple Comparison Test | Mean Diff. | q | Significant? P < 0.05? | Summary | 95% CI of diff |
|----------------------------------|------------|-------|------------------------|---------|------------------------|
| LB vs OAT | -29070000 | 8,278 | Yes | ** | -45410000 to -12720000 |
| LB vs ACT | -71730000 | 20,43 | Yes | *** | -88080000 to -55390000 |
| LB vs MH | -10400000 | 2,962 | No | ns | -26740000 to 5943000 |
| LB vs R2A | -29070000 | 8,278 | Yes | ** | -45410000 to -12720000 |
| OAT vs ACT | -42670000 | 12,15 | Yes | *** | -59010000 to -26320000 |
| OAT vs MH | 18670000 | 5,316 | Yes | * | 2324000 to 35010000 |
| OAT vs R2A | 0 | 0 | No | ns | -16340000 to 16340000 |
| ACT vs MH | 61330000 | 17,47 | Yes | *** | 44990000 to 77680000 |
| ACT vs R2A | 42670000 | 12,15 | Yes | *** | 26320000 to 59010000 |
| MH vs R2A | -18670000 | 5,316 | Yes | * | -35010000 to -2324000 |