

1 **Identification and verification of differentially expressed genes in yak**
2 **mammary tissue during the lactation cycle**

3 Mao Yuan, Wei Xia, Xiaolei Zhang, Yongtao Liu and Mingfeng Jiang

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5 **SUPPLEMENTARY FILE**

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Table S1. Primers used for qRT-PCR.

Gene Symbol	EST Accession	Forward primer	Reverse primer	Product length (bp)
<i>LAOI</i>	FG589010	5' -CCTCCAGGTAGCCAAGAAC-3' , T _m =57.3°C	5' -GGCCAGGGAAACTAACAAC-3' , T _m =56.7°C	191
<i>FASN</i>	FG588981	5' -TGATGTCCACCGAGGC-3' , T _m =57.3°C	5' -GATAAAGATGGTGGTTCTCTG-3' , T _m =54.5°C	113
<i>CRTC1</i>	FG589012	5' -AATACATTGCTTACCTTC-3' , T _m =44.6°C	5' -TCATAGTGGTTACATCAT-3' , T _m =42.8°C	146
<i>CD44</i>	FG589013	5' -TTCCGTGGGAGACTTGG-3' , T _m =58.0°C	5' -TGGAGCAGCAGTCGTTG-3' , T _m =58.0°C	127
<i>RBM47</i>	FG589015	5' -CTGGAATTAAGGGTTGAC-3' , T _m =50.2°C	5' -TCAAGCACACGAAGGAAG-3' , T _m =55.8°C	110
<i>PSAP</i>	FG589018	5' -TCAAGCACACGAAGGAAG-3' , T _m =55.8°C	5' -AGTTTGTGACGGAGTATGAG-3' , T _m =52.7°C	75
<i>COL1A1</i>	FG588963	5' -GTGAAGCGGCTGTTGC-3' , T _m =57.3°C	5' -CGGAGCCACCTGTAGT-3' , T _m =52.4°C	151
<i>SLC41A1</i>	FG588964	5' -AGAGAGGCTGGAAGAAAC-3' , T _m =51.7°C	5' -TACTGTGAACAGGTCAGAATT-3' , T _m =52.3°C	86
<i>BAG3</i>	FG589000	5' -ATCCAAGTGATCCGAAAG-3' , T _m =53.3°C	5' -TTTATTTCCACCTTCTCAGA-3' , T _m =52.5°C	80
<i>CSN1S1</i>	FG589001	5' -GGGGAGTGAATCAGGAAC-3' , T _m =55.1°C	5' -CCAATGGGATTAGGGATG-3' , T _m =56.1°C	154
<i>GLYCAM</i>	FG589023	5' -GATTCTGATTCTGTGGTT-3' , T _m =47.3°C	5' -ATCTCCAATGAAGACCTT-3' , T _m =48.9°C	106
<i>GPAM</i>	FG589030	5' -CTTTGTGATGAAGGAGGAA-3' , T _m =53.6°C	5' -ACTGATGGGATAGTTGTGC-3' , T _m =53.2°C	171
<i>PTK2B</i>	FG589032	5' -TCTTCACGGACAGAGATC-3' , T _m =51.4°C	5' -CCAGTCGCATCTTATTGAT-3' , T _m =53.6°C	79
<i>CSN2</i>	FG589004	5' -TATGGCAACTTTTCAATCC-3' , T _m =53.6°C	5' -CAAATTAAGATGAAACAGCA-3' , T _m =51.6°C	118
<i>RPS8</i>	FG588970	5' -CGAGTTCTATCTGAGGAA-3' , T _m =48.1°C	5' -AAACGCCTTTATTAGATGA-3' , T _m =50.2°C	85
<i>SRPR</i>	FG588975	5' -CTTGTGATGTAGGTCATAGAA-3' , T _m =50.3°C	5' -GCTTATTGATGGCATTGTC-3' , T _m =54.0°C	84
<i>BTN1A1</i>	FG588976	5' -GATGGGCTTGAGGGAGTC-3' , T _m =58.1°C	5' -GAGGGATTAGTTTAGAATGGAG-3' , T _m =53.9	127
<i>XDH</i>	FG589008	5' -TTGAGGAAGACACCCAG-3' , T _m =52.3°C	5' -GGAAGTATTCGTGCTATG-3' , T _m =48.7°C	141
<i>FABP3</i>	FG589011	5' -CCTTGGCTCTGCTTTATTG-3' , T _m =56.2°C	5' -TTCCGTTCTCATTGTGTCT-3' , T _m =53.9°C	77
<i>CSN3</i>	FG588993	5' -TTCTCACAGCGTATTGG-3' , T _m =50.9°C	5' -CAACCGAACCTACTGC-3' , T _m =50.1°C	151
<i>MYC</i>	FG588998	5' -GGACTCAACTAAGGAGAGCATA-3' , T _m =55.4	5' -TCCAACAAGTGCCTCT-3' , T _m =56.7°C	75

1 Table S2. The PCR efficiency, R² and slope of the standard curve for all primer pairs
 2 used for qRT-PCR.

Gene Symble	PCR efficiency (E)(%) ¹	R ²	Slope
<i>LAO1</i>	100.5	1.000	-3.311
<i>FASN</i>	98.0	0.996	-3.371
<i>CRTC1</i>	95.1	0.999	-3.446
<i>CD44</i>	100.3	0.997	-3.315
<i>RBM47</i>	97.5	0.999	-3.382
<i>PSAP</i>	95.8	0.999	-3.472
<i>COL1A1</i>	101.7	0.999	-3.282
<i>SLC41A1</i>	95.5	0.999	-3.435
<i>BAG3</i>	100.5	0.996	-3.309
<i>CSN1S1</i>	96.9	0.996	-3.349
<i>GLYCAM1</i>	96.1	0.996	-3.369
<i>GPAM</i>	96.4	0.999	-3.362
<i>PTK2B</i>	100.4	0.999	-3.312
<i>CSN2</i>	92.1	1.000	-3.527
<i>RPS8</i>	100.5	1.000	-3.309
<i>SRPR</i>	99.4	0.999	-3.336
<i>BTN1A1</i>	99.9	0.999	-3.324
<i>XDH</i>	95.3	0.999	-3.441
<i>FABP3</i>	99.0	0.944	-3.345
<i>CSN3</i>	99.1	0.999	-3.343
<i>MYC</i>	98.3	0.999	-3.364

3 Note: The efficiency of PCR amplification was calculated by using of the standard
 4 curve method (E = (10^{-1/slope} - 1) x 100%).

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