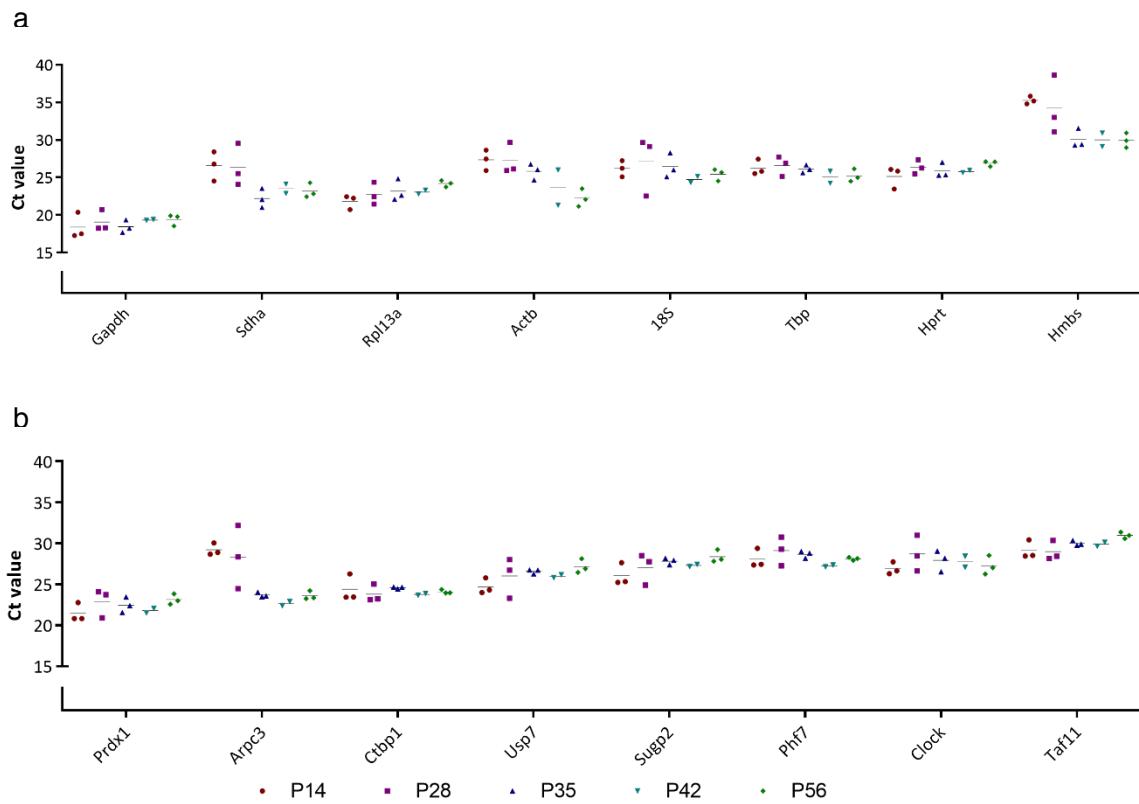


Identification of reliable reference genes for qRT-PCR studies of the developing mouse mammary gland

Anoeska Agatha Alida van de Moosdijk and Renée van Amerongen

Supplementary Files

- Supplementary Figure S1 (this PDF)
- Supplementary Figure S2 (this PDF)
- Supplementary Table S1 (uploaded separately as an .xlsx file)
- Supplementary Table S2 (this PDF)



Supplementary figure S1. Ct values and reference gene ranking for #3 mammary gland. Scatter plot depicting spread in expression of candidate reference genes in different stages of the #3 mouse mammary gland. a) Traditional reference genes b) Novel candidate reference genes.

(A)

Ranking Order (Better--Good--Average)								
Method	1	2	3	4	5	6	7	8
<u>Delta CT</u>	Tbp	Rpl13a	Hprt	18S	Gapdh	Sdha	Actb	Hmbs
<u>BestKeeper</u>	Rpl13a	Tbp	Hprt	Gapdh	18S	Sdha	Actb	Hmbs
<u>Normfinder</u>	Tbp	Rpl13a	Hprt	18S	Sdha	Gapdh	Actb	Hmbs
GeNorm qBase	Rpl13a	Hprt	Gapdh	Tbp	18S	Sdha	Actb	Hmbs
<u>Recommended comprehensive ranking</u>	Rpl13a	Tbp	Hprt	Gapdh	18S	Sdha	Actb	Hmbs

(B)

Ranking Order (Better--Good--Average)								
Method	1	2	3	4	5	6	7	8
<u>Delta CT</u>	Prdx1	Sugp2	Ctbp1	Phf7	Usp7	Taf11	Clock	Arpc3
<u>BestKeeper</u>	Prdx1	Ctbp1	Phf7	Sugp2	Taf11	Usp7	Clock	Arpc3
<u>Normfinder</u>	Prdx1	Phf7	Ctbp1	Sugp2	Clock	Usp7	Taf11	Arpc3
GeNorm qBase	Phf7	Prdx1	Ctbp1	Sugp2	Usp7	Taf11	Clock	Arpc3
<u>Recommended comprehensive ranking</u>	Prdx1	Phf7	Ctbp1	Sugp2	Usp7	Taf11	Clock	Arpc3

Supplementary Figure S2.

Comprehensive ranking of the old/traditional (A) and novel candidate reference genes (B) using RefFinder (available at <http://fulxie.0fees.us/?type=reference>). A combined comprehensive ranking of both the traditional and novel candidate genes is presented in Table 1.

Gene name	Accession Number	Primer sequence (5' – 3')	Amplicon length	PCR Efficiency %
Reference genes				
<i>18S</i>	NR_003278	F: CCGCCGCCATGTCTCTAGT R: CTTCCTAACACACCACATGAGC	150 bp	90
<i>Arpc3</i>	NM_019824	F: TGAAGCGGACAGGACATTGAT R: AGTTGGTGATTCCTAGCGTGT	122 bp	92
<i>Actb</i>	NM_007393	F: GAGCTGCCTGACGGCCAGGT R: TACTCCTGTTGCTGATCCA	365 bp	72
<i>Clock</i>	NM_001289826	F: TTTACAGGCCTTGTGATTGGA R: ACGCAAGGCCGTCTCTG	92 bp	97
<i>Ctbp1</i>	NM_001198859	F: GTGCCCTGATGTACCATACCA R: GCCAATTGCGACGATGATTCTA	83 bp	92
<i>Gapdh</i>	NM_001289726	F: CTGGTGCTGCCAAGGCT R: CTGCTTCACCACCTTCTTGATGTC ATCATA	161 bp	99
<i>Hmbs</i>	NM_013551	F: GCCCATGTGCCCTCAGTC R: TCTTGAGCCGTTTCTCCGC	151 bp	101
<i>Hprt</i>	NM_013556	F: TGTTGTTGGATATGCCCTTG R: TTGCGCTCATCTTAGGCTTT	108 bp	97
<i>Phf7</i>	NM_027949	F: TGTTGCCTCTATGCCTCAA R: GGCAGTCTGCTAGACAGGATAAG	114 bp	88
<i>Prdx1</i>	NM_011034	F: AATGCAAAATTGGGTATCCTGC R: CGTGGGACACACAAAAGTAAAGT	150 bp	96
<i>Rpl13a</i>	NM_009438	F: CCCTCCACCCCTATGACAAGA R: GCCCCAGGTAAGCAAACCTT	95 bp	101
<i>Sdha</i>	NM_023281	F: GTTGCTGTGGCTGATCG R: GCACAGTGCAATGACACCAC	149 bp	89
<i>Sugp2</i>	NM_001168290	F: TGACCAGAGGCCGATCTCTAA R: GGAAGTAATACGACTGGCACAG	158 bp	105
<i>Tbp</i>	NM_013684	F: GTCATTTCTCCGCAGTGCC R: GCTGTTGTTCTGGTCCATGAT	151 bp	94
<i>Taf11</i>	NM_026836	F: GATGGAGACGCGGACTTGAA R: GCAGGAGTAAGTAAGGACGAGTT	113 bp	99
<i>Usp7</i>	NM_001003918	F: CCACAAGGAAACGACTGGG R: GTAACACGTTGCTCCCTGATT	196 bp	88
Target genes				
<i>Wnt4</i>	NM_009523	F: ACTGGACTCCCTCCCTGTCT R: TGCCCTTGTCACTGCAA	109 bp	97

Supplementary table S2. Overview of all genes and primer sequences used in this study. The length of the amplicon and the efficiency of the primers is also listed.