

	Forward (5'-3')	Reverse (5'-3')
Genotyping		
<i>Spt5_fl</i>	GCATAACGATACCACGATATCAAC	GCCCTGGCTTCCATTCTGAGTAG
ChIP-qPCR		
<i>Ppp6r3_promoter</i>	AATGGCGGACGTATCAAGCA	TATCCTGTGATTGGCTGCGG
<i>Ppp6r3_GB_proximal</i>	ACTCCTTTCCACAGCATGG	AGCCCTGCATTGTCTTACCC
<i>Ppp6r3_GB_distal</i>	ACCTCTAGCACCTCACATCAC	ACGTTTGAAGTCACCCTTGAT
<i>Col5a1_promoter</i>	GAGGCCACGAGACTAGAAGG	CACGGCGCAGGGATCG
<i>Col5a1_GB_proximal</i>	GGCTAGAAGCTGGGATCGTC	GTCCACACTGCACAGGATCA
<i>Col5a1_GB_distal</i>	TATGACTACGTGCCCCCAGA	CCTGCCCCCGAGATCAATAC
<i>Map4k4_promoter</i>	CCAAGCCATGGTGTGAGC	CGGCTTGTCTGTCGGT
<i>Map4k4_GB_proximal</i>	GCAAGTTTAGGCCCAAAGGC	CAGAATGACGTCGCTCCTCA
<i>Map4k4_GB_distal</i>	CTGGTTGGTACAGAGAGCGG	TTAGGCCTTCGAGCACATCC
<i>Ankrd17_promoter</i>	TGTCTTCTCCGCGCTACTTC	GAGTCTGCACTTGGGAGAGG
<i>Ankrd17_GB_proximal</i>	CCTCTGCTGCCTCGAGTTAC	GCGGCGTTGTAGGACCTTAT
<i>Ankrd17_GB_distal</i>	TACCTGAGGGACTTGGAGCA	ACCATTTGGGCCCTTTAGCA
<i>Chd2_promoter</i>	ATCTTGTGCCGTGTGTGGT	AAGAGGCCATGTTGTGTGGT
<i>Chd2_GB_proximal</i>	CTCTCCCAGAGCCCTCCAG	CAGCGAAGAGGCCATGTTGT
<i>Chd2_GB_distal</i>	TGGCCAGCTCATGATAGTGC	CTTTCCACCCTTGACCCTCC
<i>Negative ctrl</i> (Chr1 intergenic)	CATAGATGAAGCTGCCACATAGGT	GTGGGCAAGGACAAAGCATT
Nascent transcript qPCR		
<i>Lass6_proximal</i>	TGCATCGGAAGATTGGTCGT	AGAAGGCTTATTTCTGCTTCCA
<i>Lass6_distal</i>	GCTGGAGGTGTTGGGGATATAA	AGTGCCAACCTTGATTCTT
<i>Med13l_proximal</i>	TGCCCCGGGAGAGTACGAAT	GCCGTTCACCAATTTTCCA
<i>Med13l_distal</i>	TGGGGATGCAGTTTGCTAGA	AAATGGGGCATTTTATGGCT
<i>Usp32_proximal</i>	GAGTGTGTCTGTGTGGTGCTT	TAATGTCTGGCCACTAATCTGCT
<i>Usp32_distal</i>	AGCACTTGCCAGACAACCAT	GTTGGCTAGCTAAGACCCCC
<i>Stard13_proximal</i>	TGAAAATTCCTGGTAGGGCCA	TATGACATGCCCTGTGTGGT
<i>Stard13_distal</i>	CCGTCATCAGTGAGGCTACC	ATGCATCTTCATGGTCCCCC
<i>Katnbl1_distal</i>	CATTTGCTTGAGCTTCGGAGA	CAAACACAAAAATTAATCGTGGTCA
<i>Noct_distal</i>	ACACATACAACAACTCTCGGG	TGTTCCAGCCTGAATCACCA
mRNA transcript qPCR		
<i>Fas</i>	ACCATACCAATGAATGCCTCAA	TTCATCTATCTTGCCCTCCT
<i>Dnajb9</i>	AGCTTTTGGAGGCCAGGATTA	GGGGTCAGGGAACCGGAG
<i>Olfr920</i>	GTCAGTGAAGAACAACCTGCTG	CTTGGCCATGCATCTGGAAAT
<i>Serpine1</i>	GTCAGGCATGCCAACTTCT	ATGGAAGGGCAACATGACCA
<i>Fam150a</i>	CAGACCTAGGAACTTGTGCT	GCCACTCATAGGTTTCTCCTGA
<i>Wipf1</i>	CTTCCTCCCGGTGGCAAAT	GCTGGAATGCCGAAGCTGA
<i>Drosophila Act5c</i>	AAGTTGCTGCTCTGGTTGTCG	GCCACACGCAGCTCATTGTAG
Elongation rate qPCR		
<i>Chd2_proximal</i>	TGTCTTTTGAGATTGCTCAGGTT	TCTGAGGGGTCTGTTTCCA

Chd2_distal	GTGAGGGAATGGAAGCAGAAGA	TTCTGGGGCCTGAAGTCATC
Map4k4_proximal	CAAGGTTATGGACGTCACCGA	CAGGGCCGGAAGAACTTGAA
Map4k4_distal	GGCCTTTCCGTGTTTTTGAAC	TGGCCACTTCTGTCCAAGAG
Usp32_proximal	CTAAGGCTGGCTTTCTCTTGT	GCCTCTTGTAAGGAGGACGAG
Usp32_distal	TTAGCACTGTGCCTTGGCTG	ATAAGTGACGTAATGGCCCCC
Abi1_proximal	GTGGGGGAGTGGGGTTATTC	TTCTAGAGCTTTTCTCTTGTCTC
Abi1_distal	CATGTTATACTTTGTTTCCTCCACA	GGACAGCTCATCATCCTTGTCT
Fam120a_proximal	GGGCTGCACTGGGGATATTG	ACCATCCCAGGCATTCCAAA
Fam120a_distal	GTGGAAGGTACTACGGCAGAG	GGAGACATGGCAGGAGTGAA
Nckap1_proximal	ACCAAAGGAACTTGTCTGTGC	TTCCAAAGGTTTCAGTGCGGT
Nckap1_distal	TGAGAATGGACGTGAACAGCA	TGTCTCTTGGCCAATTTTCAGT
Col12a1_proximal	GGTGAATGTGACAGCCGAGT	AGGAGAACTCCTCCCATACC
Col12a1_distal_1	CTAGTGGTCGTGTGCAGAAAGT	GGCAGAGCCTACCCATGTTAC
Col12a1_distal_2	CCGTACAATGGGCAAGGCTA	TCTCGACCTGCCTTCAATCC
Med13l_proximal	TGAATGTAGGACGCTGCTCT	GCAGATGACCCCGTGTCTAA
Med13l_distal	AAAGTTCTCGGGTCTTTCCCC	GAAGGAGCTCATCGGTCTGC
Ppp6r3_proximal	TGCCAAGTTGATATTGTAGACCA	CGTGTCTATGTGGGATGATGAC
Ppp6r3_distal	GGTCGTGGTGCCTAGTATGT	TGGCTCTGGGGTCTCTTCTG
Noct_distal	CCAGGCTTCCCCATTGTCTT	GGCACTGCACAAAGTTGTCTT
Katnbl1_distal	ATATCTGTGGGGACTTTTGGGG	CTTGAAGCCAGTTTAAACCAAC

Table EV2

This table lists all primers used in this study categorized by the application.