

Supplementary Table 1: Oligonucleotide Primers, Antibodies, and TaqMan probes

Genotyping primers:

Gene	Forward sequence	Reverse sequence
<i>Cre recombinase</i>	TCTATTGCACACAGCAATCCA	CCAGCATTGTGAGAACAAGG

List of antibodies

Antibodies	Concentration	Supplier	Catalog number
Anti-mouse IgG HRP linked antibody	1:4000 (IB)	Cell Signaling Technology	7076
Anti-Rabbit IgG HRP linked antibody	1:2000 (IB)	Cell Signaling Technology	7074
GAPDH	1:1000 (IB)	Cell Signaling Technology	2118
pH2AFX	1:1000 (IB), 1:200 (IF)	EMD Millipore	05-636

Oligonucleotide primers used in qPCR reactions

Name	Sequence
<i>Gapdh</i>	Forward: AACTTTGGCATTGTGGAAGG Reverse: GGATGCAGGGATGATGTTCT
<i>Lipo2</i>	Forward: ACTCCAACGACTATCAAGCTCC Reverse: TCCACCCATCGATCCCATGA
<i>Ptk2b</i>	Forward:GTGGCCGTCAAGACCTGTAA Reverse: CACGATGTGAGGGTGGTCAA
<i>Abhd1</i>	Forward: GACTTTGCGATAAAGGCCCG Reverse: GGGCTTGCGGCTTGGTAATA
<i>Ptprn2</i>	Forward:GGAACCTGCCCTGGTACATC Reverse: CTGGGGACCCTTGGAAGTTG
<i>Mme</i>	Forward: GTCATTGGTCGGGATGTGT Reverse: CCCATCACCTAAAATCAGTGGGA
<i>If81</i>	Forward: ATTGACCCCAAGCAAGATGT Reverse: ACGGAAGGTGCTCATGTCTG
<i>Gon4l</i>	Forward: CTCAAGACAAGCCACTCGGA Reverse: TGTCTTGCTCTTCGGTTGGG
<i>Arc</i>	Forward: CAGTCTTGGGCAGCATAGCTC Reverse: TGGTATGAATCACTGCTGGGGG
<i>Naip2</i>	Forward: ACAGATCTTCATACTGAAACCACC Reverse: CCTGGGCTGCCATTTTTCTTC
<i>Paqr7</i>	Forward: TCAGCCCATCAGAAGTTTTC Reverse: TGAAGTTCTGGGCTACTGCC
<i>Alcf</i>	Forward: ATCACAAATCCGGGGATGGA Reverse: CCTTTGTCCATTTTCCTGGACC

<i>H2-T24</i>	Forward: CCTTGTTCTGAAATGGGAGCCT Reverse: CAGCAAGGTTGCTTGAGGAC
<i>Lrn4</i>	Forward: CAGTATTCCAAAGACTGAGGACC Reverse: CTCTAGGGAAAGACAGGCAGC
<i>Slc46a2</i>	Forward: TGTTCTACATTGCCCGAGCC Reverse: TGGACATGGCTGACCTGATG
<i>Trnp1</i>	Forward: CCTGAAAGTGACACTAAGCTCCT Reverse: GACTGGGTACCGTCAGTCCT
<i>Ler5</i>	Forward: GATCTACAACCTCGCGGGTCC Reverse: CACTCAGGTAGACTTGGCGG
<i>Lonrf1</i>	Forward: GAAAACCTCCAGGCAACACC Reverse: CTTCGTCAACCGTTCCTCCA
<i>Per3</i>	Forward: CTCGCCCTACGGTTGCTATC Reverse: CAGTGGACCCTGCTTGAACA
<i>Strit1</i>	Forward: GAAAGACTCCTGGCCCTGAC Reverse: GTGGTGATGTTGACTCTGCTTT
<i>Ctsh</i>	Forward: CCAGGCCTTCGAGTACATCC Reverse: GCAACAGCTTTTTGGGGGTT
<i>Hspb11</i>	Forward: CAGGCGAGCGGGCTAAC Reverse: TCGATGTGGCCAGAATCACTT
<i>Cdsn</i>	Forward: CGGTCTTATTCTGCCAGGAATCT Reverse: TCATTCCGGGGAGGTGATCCT
<i>Cpox</i>	Forward: TTCGTGAAGACGTGTGCTGA Reverse: AACTCCACATAACCGCCCTC
<i>Msc</i>	Forward: GGAAAGCATGAAGACGTGGC Reverse: CCATCTAACTGCCCTGTCCC
<i>Mybpc2</i>	Forward: CTGCTAGGGCCTGGTTAGAG Reverse: CCTTTTTGGCCGCTGGTTTA
<i>Mmrn2</i>	Forward: ATTCACAGCAGCCATGTCCA Reverse: TGGGCCACTCGATACATGAC
<i>Mid1p1</i>	Forward: CGCCCTTACTCACAGTCCG Reverse: TCTAGCCTTTTTCTGCTCTTGC
<i>Adamts19</i>	Forward:GACAATGGTGTCTGCACAA Reverse: CTGTCATCATCCACCTTGTTTG
<i>Ddit4l</i>	Forward: GAAATCCGGCAGCGCCTA Reverse: TAGCCACCGTCCAACAACCTC
<i>Srpr</i>	Forward: GCCATTGCCTTTGCACGTAA Reverse:GCAGTCATCAGAGGGGCATT
<i>Smoc2</i>	Forward: GGAGCAGGGAAAGCAGATGAT Reverse: AACTTGCTCGGTCCAGAGTG
<i>Slc1a4</i>	Forward: TGCCGCATTCACTACGTCTG Reverse: AGGGCAAAAAGGACGAGACC
<i>Lsm11</i>	Forward: GCATCCGAGAGGGAGTCAAG Reverse: CACGTCAGTGAGGGCCATATT
<i>Gpmb</i>	Forward: AACACAAGGCGTACAAGCCA Reverse: CTGGTCTCCTCGGAAGAACG
<i>Mmp12</i>	Forward: TCTGCTGAAAGGAGTCTGCAC Reverse: AGGTTTCTGCTGGGAACCTTCA
<i>Lgals3</i>	Forward: TACTAGAAGCGGCCGAGC Reverse: TGTCTGCCATTTTCCTGGGTA

<i>Camk2n1</i>	Forward: GGAGCAAGCGGTTGTTATT Reverse: CAGCCCGCCACTCTTCTTAT
<i>Ctss</i>	Forward: CCACGCTGCCATCAGAAGA Reverse: GATCCCAATGGTAGTCCAGGG
<i>Mpeg1</i>	Forward: AGCCTTCTGACAGAGTCTTGTT Reverse: TCTGCTTCAGCACACGCTAT
<i>Eef1a1</i>	Forward: CGTCGTAATCGGACACGTAGA Reverse: AGGAGCCCTTTCCCATCTCA
<i>Lama4</i>	Forward: CTACACATCAGGGTCGGACG Reverse: CCCATCGTGGTACTGCTTGT
<i>Rpl3</i>	Forward: GCGGAGCCATCACTTGG Reverse: AGCTGAGAATTTCTGTGAGACATC
<i>Iqgap1</i>	Forward: CAGCAGTACCAACGACGGTT Reverse: CAGCTGGGCTTCAGGATTCA
<i>Lgals1</i>	Forward: CTTCAATCATGGCCTGTGGTCT Reverse: TGTCTTTTCCCAGGTTTCAGCA
<i>Tmsb4x</i>	Forward: GGCCATTTCTAAGTTCCGCC Reverse: AGTCCGGCTTAACTCCTTCG
<i>Ahnak</i>	Forward: TCCCGTAGCTCTGAAGTGGT Reverse: CCACTGCTACAGCCCTGCAT
<i>Atp11a</i>	Forward: GTCTAGCCCAACGCTAGAACA Reverse: GCACACAACCTCTCCAGAGG
<i>Utrn</i>	Forward: AACATCCTCGGCTTGGCTAC Reverse: GGACTGGGAGGGGTCATAGT
<i>Msn</i>	Forward: GGAGTCCTTGCCGAAGTGTA Reverse: ACACGCACACTGATCGTCTT
<i>Clic4</i>	Forward: TGTGCCACCCAAGTACCTA Reverse: AGCGCTTCATTAGCCTCTGG
<i>Prpf8</i>	Forward: GTTACGGAACCCACCAT Reverse: GACGCCACATTCACGTTGTT
<i>Jak1</i>	Forward: TGACCAGGCAAGATCCAGAC Reverse: GACCCTCTCCCAAGTCACGA
<i>Reep5</i>	Forward: TCCTGCACGAGAAGAACTGC Reverse: ACCAGTCCGATGACACCGAG
<i>Mapkapk2</i>	Forward: ATGGGAGGATGTCAAGGAGGA Reverse: CAGAGGGTTGGATGCGTCTT
<i>Canx</i>	Forward: GAGGCCTCTTAGTTCTGCGG Reverse: CCCTTCCATGATCTCGAGCC
<i>Gfm1</i>	Forward: CTCTCCGATTGCTCGCTTT Reverse: CTCTCCGATTGCTCGCTTT
<i>Stat3</i>	Forward: GCCCCGTACCTGAAGACCAA Reverse: ACGTGAGCGACTCAAACCTGC
<i>Itga9</i>	Forward: GCGTTCTAAGGATTAAGCGGA Reverse: CTTCTTCCAGCGAAGCACTG
<i>Nudt4</i>	Forward: TAGCAGTCGGTACCCAGACC Reverse: CCTTTGACTCCAGCCTCTTCAT
<i>Tfrc</i>	Forward: TAGGCCGCGGGTTCGAG Reverse: GCTACAAGGGAGTACCCCGAC
<i>Arl8a</i>	Forward: GACTGGTTCAAGGCCCTGTT Reverse: TTGAACGTCTCTGACGCGA

<i>C3</i>	Forward: TCCTTCACTATGGGACCAGC Reverse: GGGAGTAATGATGGAATACATGGG
<i>Acta2</i>	Forward: CCAGCCATCTTTCATTGGGATG Reverse: TACCCCTGACAGGACGTTG
<i>Slc28a2b</i>	Forward: AGCCAGATCTTGTGGCTGG Reverse: TCCTCCAGCATACCGCACT
<i>Ucp3-F1</i>	Forward: ACCCGATACATGAACGCTCC Reverse: AGAAAGGAGGGCACAAATCCTT
<i>Angptl4</i>	Forward: ATTGTTCCAGAAGGTGGCCC Reverse: GCCAAGAGGTCTATCTGGCTC
<i>Pdgfr</i>	Forward: GCTGGAGTCCCTTTCTGGTAAC Reverse: CTGATTCCACGTTGCCATGC
<i>Itih4</i>	Forward: CTGCCCTCCGTTGCACAATA Reverse: CCGGAAGCGGCAAGGTAATA
<i>Alox5</i>	Forward: CGAGTGACAGGGTCAAGAAGT Reverse: GACCGTGTAGGAGGGCATGA
<i>Rorb</i>	Forward: CTTTCTCCCTCGTGCTGAG Reverse: TCACTTCAATTTGTGCTCGCAT
<i>Ncad</i>	Forward: TCGTGATGGGTGAGGAGACA Reverse: GAGGATCGCCCTGAGAACAC
<i>Tmem82</i>	Forward: TCTGCCAGATACAGGGCTTTC Reverse: TCCATCCTGATTCTCCTTCTGC
<i>Sel1l3</i>	Forward: AGGAGCTCTACGAAAGGTGC Reverse: TGCCGATTGTCTCTCCAACC
<i>Armcx4</i>	Forward: CGAGCAGAGCAGTTCGATGT Reverse: CTCCATAGATCCTGTGCAGC
<i>Atp10d</i>	Forward: ACCTCGGCAAAAGATTGGACT Reverse: CCGGACGGACAATTTCTGGA
<i>Dct</i>	Forward: GTGATCACCACGCAACACTG Reverse: GGGCGTCCTGGACCTAATAA
<i>Gstp2</i>	Forward: AGCACTTGATCCCCACTTCTC Reverse: GGTAACCACCTCCTCCTTCCA
<i>Adam19</i>	Forward: ACAGTTCCTGTCCACACCAAT Reverse: TCTGCTCTGAGTGGATGCTTT
<i>Egf-F1</i>	Forward: GGAGGTCCGCTAGAGAAATGT Reverse: TGGGGCATGTGCAGTGATAG
<i>Adar</i>	Forward: CTTGCCGGCACTATGTCTCA Reverse: CTGCGGGTATCTCCAATTGC
<i>Gbp4</i>	Forward: AGACTTTCCTGTGAGGAAGGAT Reverse: TTCCACAAGGGAATCACCATTTT
<i>Ifi27</i>	Forward: GGCCTAGGAGGCAAAAGTCC Reverse: GTTCCAAACAGGAACCGAATCTTT
<i>Nmi</i>	Forward: GAGATGGACGATATGAGAGGCG Reverse: CCACTGCAATTCAGCTTCAAGT
<i>Trim25</i>	Forward: GTGCGGCCACAATTTCTGC Reverse: GACATTGCGGGCATCGGTA
<i>Parp12</i>	Forward: CATCCTATGGCAAAGGGAGC Reverse: TGACGAAATCTCCGACCAGC
<i>IL18BP</i>	Forward: AGCAGTCCCAACTAAGCAGTA Reverse: CAGCCAGTAGAGGATGCTGA

<i>Ifih1</i>	Forward: GATGTTCTGCGCCAAACTGG Reverse: ACGAGTTAGCCAAGTCTGTGTT
<i>Ier5</i>	Forward: TCACCGCATCGTCAGCATC Reverse: GGGGTCACTCAGGTAGACTTG
<i>Ier3</i>	Forward: CAGCCGAAGGGTGCTCTAC Reverse: AGCCATCAAAATCTGGCAGAAG
<i>Ddit3</i>	Forward: AAGCCTGGTATGAGGATCTGC Reverse: TTCCTGGGGATGAGATATAGGTG
<i>Xpc</i>	Forward: AAAGAAACACCCAAAAAGCAAGG Reverse: CAGCACAGGTTTCAGTAAGCTC
<i>Cgrrf1</i>	Forward: GCCGCAGTGTTCTGGTAA Reverse: TGGTGACGATGAAGCAGGTG

TaqMan probes

Gene	TaqMan Assay ID
<i>Gapdh</i>	Mm99999915_g1
<i>Myh7</i>	Mm0060555_m1
<i>Nppb</i>	<u>Mm01255770_g1</u>