

Supplemental Table 1: Primer sets for qRT- PCR and RT-PCR.

Gene	Forward (5'-3')	Reverse (5'-3')
KRT14	GGAGATGATTGGCAGCGTGGAG	AGAACTGGGAGGAGGAGAGGTTG
KRT5	AAGCTGCTGGAGGGCGAGGAATG	CGGGAGGAGGAGGTGGTGGAGAC
KRT8	GCTGACCGACGAGATCAACT	CATGGACAGCACCACAGATG
SNAI2	GGGAGAAGCCTTTTTCTTG	TCCTCATGTTTGTGCAGGAG
TFAP2A	ACCTCTCGATCCACTCCTTA	CCGGAACTGAACAGAAGACT
SOX9	GAGCAGACGCACATCTC	CCTGGGATTGCCCGA
MSX2	GGTCTTGTGTTTCTCAGGG	AAATTCAGAAGATGGAGCGG
MYC	CGTCTCCACACATCAGCACAA	CACTGTCCAACCTGACCCTCTTG
IRX2	GTGGTGTGCGCGTCGTA	GGCGTTCAGCCCCTACC
DLX3	CGGTTCTGGAACCAGATTTT	CTTCCAGAAGGCCCAGTACC
NOG	GGAGGAAGTTACAGATGTGGC	CACTCGGAAATGATGGGGTACTG
KLF4	ACCAGGCACTACCGTAAACACA	GGTCCGACCTGGAAAATGCT
SOX10	TCGGCAACGTGGACATTGGT	CTGCTGAGTAGCTGCTCACA
NES	CAGCGTTGGAACAGAGGTTG	TGAGCGATCTGGCTCTGTAG
PAX3	ACCACCTTCACAGCAGAACA	CAGCTTGCTTCTCCATCTT
NGFR	TACGGCTACTACCAGGATGA	GTGTGGACCGTGAATCCAA
FOXD3	CGTTCAGCATCGAGAACATC	GAGAGTGGCAGCTAAGAAT
ID2	TTGTCAGCCTGCATCACCAGAG	AGCCACACAGTGCTTTGCTGTC
CKIT	TACTCATGGTCGGATCACAAA	CCACTTCACAGGTAGTCGAGC
NR2FI	GCTCCTCACGTACTCCTCCA	AAGCCATCGTGCTGTTTAC
B3GAT1	GTCTTCCAGCCGACCACCTT	CTACTTCGCCGACGACGACA
KI67	AAGCTGCTGGAGGGCGAGGAATG	AGAACTGGGAGGAGGAGAGGTTG
ZEB1	TGCAGTTTGTCTTCATCATCTG	CCAGGTGTAAGCGCAGAAA
ZEB2	CAATACCGTCATCCTCAGCA	CCAATCCCAGGAGGAAAAAC
FOXC2	GCCTAAGGACCTGGTGAAGC	TTGACGAAGCACTCGTTGAG
SNAI1	CCTCCCTGTCAGATGAGGAC	CCAGGCTGAGGTATTCTTG
TWIST1	GGAGTCCGAGTCTTACGAG	TCTGGAGGACCTGGTAGAGG
CDH1	GAGAACGCATTGCCACATAC	GAAGAGCACCTTCCATGACA
CDH2	CTGACACTGTGGAGCCTGAT	GTGGAGCCACTGCCTTCATA
TUBB3	GCGGATCAGCGTCTACTACA	CACATCCAGGACCGAATCCA
NR4A2	ATGACCAGCCTGGACTATTC	GCCAGTCAGGAGATCATAGA
MPZ	TGGCTGTGCTGCTTCTCT	TGGTAGCGCCAGGTGAAGGA
PMP22	GCTGAAGATGATCGACAGGA	TCAGGAAATGTCCACCACTG
EGR2	TTGACCAGATGAACGGAGTG	CAGAGACGGGAGCAAAGC
S100B	AAAGAGCAGGAGGTTGTGGA	AGGAAAGGTTTGGCTGCTTT
NFATC4	GGCTGTACCTCGATCCTCAG	GGGACACAGCCCTATCTTCA
MITF-A	GAGTCAGACACCAGCCATAA	CATACAGGACGCTCGTGAAT
PMEL	CCATCTGGCTCTTGGTCTCA	AGGCACCTGGTCAGTAATGG
DCT	GACGATCCGACTCTGATTAG	GAGACAGGCAATCTCGTATG
TYR	TTGTAAGTGCCTGCTGTGGAG	CAGGAACCTCTGCCTGAAAG
GPNMB	TGCTCCCTCATGTAAGCAGA	TTCCTGGGATTTCTGCTCCT
ALP	ACCATTCCCACGTCTTCACATTTG	AGACATTCTCTCGTTCACCGCC
RUNX2	TGTGGAGTTTGGTGTCTACTAGTGTGT	GAAATCTGCCATGTGACTGCC

COL2A1	AACTGGCAAGCAAGGAGACA	AGTTTCAGGTCTCTGCAGGT
ACAN	GTCTCACTGCCCAACTAC	GGAACACGATGCCTTTTAC
PPARG	TGCCTTGCAGTGGGGATGT	ATCGCCCTCGCCTTTGCTT
LPL	GAACCGCTGCAACAATCTGGGCTATGA	TGCTGCTTCTTTTGGCTCTGACTTTATTGA
ACTA2	ACCCACAATGTCCCATCTA	TGATCCACATCTGCTGGAAG
TAGLN	ATGGCCAACAAGGGTCC	CTTCAAAGAGGTCAACAG
SMTN	GGTCGAAGATGCTGCCCATCTT	TCCGACAAAGGAAGAGAGACC
CALD1	AGATTGAAAGGCGAAGAGCA	TTCAAGCCAGCAGTTTCCTT
MYH11	GGACGACCTGGTTGTTGATT	GTAGCTGCTTGATGGCTTCC
EZH1	ACTATGTGGTGCCTTCTCCG	CATGTGGCACAGACTGCTTC
EZH2	CCGGAGACCTAGATGTCATTG	GGCCTGTCTTCTCGCTTTCTCTT
DNMT3A	CACACAGAAGCATATCCAGGAGTG	AGTGGACTGGGAAACCAAATACCC
DNMT3B	AATGTGAATCCAGCCAGGAAAGGC	ACTGGATTACACTCCAGGAACCGT
18sRNA	CAGCCACCCGAGATTGAGCA	TAGTAGCGACGGGCGGTGTG

Supplemental Table 2: List of antibodies used in this study.

Antibodies	Catalog #	Source	Application
Integrin β -1	MAB 1987Z	Millipore	IF
P63	559951	BD	IF
KRT14	AJ1219a	ABGENT	IF, FC
E-Cadherin	610920	BD	IF, WB
Beta catenin	610154	BD	IF
N-Cadherin	3195	Cell signaling	IF, WB
P75NTR/LNGFR	AHU0302	Invitrogen	IF, FC
AP2	3B5	DSHB	IF
SLUG	PA186737	Invitrogen	IF
PAX3	Pax3	DSHB	IF
SOX10	α SOX10 rb X 10 ⁻⁴	Michael Wegner's Lab	IF, FC
FOXD3	Poly6317	Biologend	IF
Tuj1	MMS-435P	Covance	IF, IHC
Tuj1	801201	BioLegend	
MAP2	MAP	Aves Labs	IF

Peripherin	PER	Aves Labs	IF
Peripherin	ab4666	abcam	
NEUN	NUN	Aves Labs	IF
BLBP	ABN14	Millipore	IHC
GFAP	SMI22	Sternberger Monoclonals	IHC
MPZ	PZO	Aves Labs	IF
PLP1	PLP	Aves Labs	IF
Nestin	MAB5326	Millipore	IF, FC
GFAP	AM1870b	Abgent	IF
S100B	701340	Invitrogen	IF
S100B	52642	abcam	IF
BRN3A	AB5945	Millipore	IF
5-HT	ab66047	abcam	IF
MITFA	180369	Invitrogen	IF
Vimentin	550513	BD	IF
CNPase	PA5-29345	Invitrogen	IF
HMB45/PMEL	08-1050	Invitrogen	IF
KLF4	12173	Cell signaling	IF
Ki67	ab16667	Abcam	IF
MYC	9E10,	DSHB	IF
Alpha actin	A5228	Sigma	IF, IHC
Calponin	sc-58707	Santa Cruz	IF
Calponin		Sigma	IF
Myosin heavy chain	BT-562	Biomedical Technologies	IF
CD49b	51-9002113	BD	FC
CD73	550256	BD	FC
CD90	555593	BD	FC
CD105	MAB2152	Chemicon	FC
CD44	550988	BD	FC
CD45	642284	BD	FC