

822 **Supplementary Material:**

823 The Table S1 represents the list of genes under study with the respective amplicon context sequences,
 824 ensemble gene ID and PCR product lengths.

825 **S1 Table** - List of genes under study with respective amplicon context sequence, ensemble gene ID and PCR
 826 product length.

827

828

829

830

831

832

833

834

835

836

837

838

839

840

Marker Type	Marker	Gene Symbol	Amplicon Context Sequence	Ensembl Gene ID	PCR product	
Housekeeping	GAPDH	Gapdh	TGATGGCAACAATGTCCACTTTGTCCACAAGAGAAGGCAGCCCTGGTA ACCAGGCGTCCGATACGGCCAAATCCGTTACACCGACCTTACCAT CTTGTCTATGAGACGAGGCTGGCACTGCACAAGAAGATGCGGCTGTC TCTA	ENSRNOG00000018630	115 bp	
Multipotency	Nanog	Nanog	GAAAATTATTCTTGTACAAGTGTCTGCTACTGAGATGCTCTGCACA GAGACTGCCTCTCCGCTTCTCTGCGGACCTACCTTCAAGAT AGCCCTGATTCTTAGCAAT	ENSRNOG00000008368	87 bp	
	Oct4	Pou5f1	GCAGTTGGCAAAGTGTCTAGCTCTTCTGCGAGGCTTTCATATCCT GGGACT CCTCGGACTAGGTTCCACCTTCTCCAACCTCACGGC	ENSRNOG00000046487	61 bp	
	Sox2	Sox2	GCAGTACAACCTCCATGACAGCTCGCAGACTACATGAACGGCTCGC CCACCTACAGCATGCTCTACTCGCAGCAGGGCACCCTGGTATGGCG CTGGGCTCCATGGGCTCTGGTCAAGTCCGAGGCCAGTTC	ENSRNOG00000012199	106 bp	
MSCs	CD105	Eng	AAGTCTACAAGACTGTCTCATGCGCTGAACATCGTCACTGCTGACC TGTCTGGCAAAGGCTCGCTCGCCCTGTACTGGGCATCACCTTTG GTGCTTCTCATTGGGGCCCTGCTCACAGCTGCACTGTGTACATCT ATTCTCACACAGTGAGTATCCCAAGCTTCCACCCCTTCTACAG TGAGTGTCTAGGGCCGCTCCACACCAACCCAGGGCA	ENSRNOG00000050190	198 bp	
	CD109	Thy1	TTGACTGTGTCTGCTCGTGTATAGTGATACTGTTGAAAGTATCG CCAGTAGGCAAGGAGGGGGAGGGCCCTCAAGATAGGAGAGCGCT GCTGAGCCTTTGGGACCAACAATAAGGATGAGAAGTATAGATTGTA	ENSRNOG00000006604	110 bp	
	CD73	Nt5e	ACTTCTATGGAATCCCATTTCTGAAACAGCACCATTCTGGAAGAT GCAGCCATCAAGCAGACATTAACCAAGTGGAGGATAAAATTAGATA ATTATTCTACAGGAACTCGGGAG	ENSRNOG00000011071	89 bp	
	CD44	CD44	ATGTAGCCTCTGGGGTGTCTTCTCAATGGTGGATCCACTGCTGACA TCCTCATATAATGTTTGGGACATCGATGCTTCTTGGTGTGTTCTAT ACTCGCCCTTCTGCTGTA	ENSRNOG00000006094	86 bp	
Hematopoietic	CD45	Ptprc	CTCTTTTGCTCATCTAGTTCATGCTTAAGTGGCACTGTAAAGT CATATGGAACAACGTTAGAAGCTGTTTTTTCTTTTCTTCTTGA TTTCCAATGTGCTGTCTCCAGCTCCTGTATGAAGGAAGTCTCTGG TAC	ENSRNOG00000000655	120 bp	
	CD34	CD34	AACCGTCACACTGCCTACTACTTCAGACAGTACTTCTACTCCAGAAGT GGAACTCCACTGGAAACACAGCCTGCCGTGTCAATGTTTCTGA TTATTACCTAAATAATGTCAAGCTCTGAGATGATATCAACCACTGAG	ENSRNOG00000050078	112 bp	
Hematopoietic	Osteogenic	BSP	lbsp	TCCCGCGAGGCTCCCGTGTCTGCTATAGGTTTCATACGCAAGT TTGACTCGTTGCTATTGTTGCTATTCTTCCCACTAACCGTGTCT GCTCTTCTGGTGG	ENSRNOG00000002158	83 bp
		Runx2	Runx2	CACACGTGTAGTAAAGGCTCAACCATGACACGTACAGCCTAGGAAC ACAGATGCATTAGGAGTGTGACCCCGCCCTTACCACACAG CCATTCAGGGG	ENSRNOG00000020193	74 bp
	Chondrogenic	Coll II	Col2a1	CAAGGCCCTTCTGAGGTTGCCGGCTGCTCGTCCAGGTAGGCAATGCT GTTCTTACAGTGGTAGGTGATGTTCTGGGAGCCCTCAGTGGACAGTA GACGGAGG	ENSRNOG00000022282	73 bp
		Aggrecan	Acan	CCCCTACCCTGCTTCTCCAGAAGGTCAGGAGAAACAGAGTCAACC GCTGCAGACATTGATGAGTGCCTTCAAGCCCTTGTGAAATGGAGC CACCTGCGTGGATGCCTTGGACACTTTCACATGCTTATGCCTTCC	ENSRNOG00000028992	109 bp
	Adipogenic	Ap-2	Ap2m1	AGTGCACTGTCTGAGTCTGTTGGGTAGCCAAAGTCCAGAAATCTCG TCCAGCAGCTGTATATGAGCACGAAATGTTCTTGATGTTCTCTCG CTGATCTTGCCAAAGTAAGCAGCCATTACATCA	ENSRNOG00000001709	99 bp
		AdipoQ	Adipoq	TTCATGACTGGGAGGATTAAGAGGAAACAGGAGCGCTTGAACAGT AGCATCTGAGTCTGGAACTTTGGTGAATCAGATCCACTGGCACT CGTACAGACAGGAATGAAG	ENSRNOG00000001821	83 bp
	Neurogenic	NGF	Ngf	TTCATGACTGGGAGGATTAAGAGGAAACAGGAGCGCTTGAACAGT AGCATCTGAGTCTGGAACTTTGGTGAATCAGATCCACTGGCACT CGTACAGACAGGAATGAAG	ENSRNOG00000001821	83 bp
		GDNF	Gdnf	GGCTTTGCCAAGGACGAGCTTCTATCTGGCCACTCTGAGGTGCAT AGCGTAATGTCCATGTTGTTCTACTCTGATCAGCGTTTTGATCG GCGTACAGGCAGAACCGTACACAGATAGCAATGTC	ENSRNOG00000016571	103 bp
	Tenogenic	Tenomodulin	Tnmd	ACTGAAGATTTGTGGACTAGTGTGGTATCTGGCCCTAACTCTAAT TGTCTGTTTTGGGGAGCAACAACCTTCTGGCCGAGGTATCCAAGA AGACCTATGGCATGGAGCACATTTCTACAGCAATGGCGAGAAGAA GAAGA	ENSRNOG00000003896	116 bp
	Muscle	Desmin	Des	ACCAGGATCTGCTCAATGTGAAGATGGCCTTGGATGTGGAGATTGCC ACCTACCAGGAAAGTCTGGAGGGCAGGAGAGCAGGATCAACCTTC CGATCCAGACCTTCTGCTCAACTTCCGAGAAAC	ENSRNOG00000019810	100 bp