

# Table S4

Category	Entrez Gne Name	Symbol	Fold change CL/Mat In CON	Fold change KO/CON in CL	Location	Entrez Gene ID for mouse	
ESC	sonic hedgehog	<b>Shh</b>	15.91	-2.43	Extracellular	20423	
	twist homolog 2 (Drosophila)	Twist2	10.62	-0.94	Nucleus	13345	
	delta-like 1 homolog (Drosophila)	<b>Dlk1</b>	10.16	-0.87	Extracellular	13386	
	microfibrillar-associated protein 4	<b>Mfap4</b>	9.9	-0.75	Extracellular	76293	
	calcium channel, voltage-dependent, T type, a1H	Cacna1h	8.87	-0.09	Membrane	58226	
	unc-5 homolog C (C. elegans)	Unc5c	8.61	-0.34	Membrane	22253	
	R-spondin 4	RSPO4	8.58	-1.12	Unknown	228770	
	matrilin 4 (collagen-like)	<b>Matn4</b>	7.86	-0.64	Extracellular	17183	
	immunoglobulin superfamily, member 9	Igsf9	7.81	-0.31	Membrane	93842	
	keratan sulfate Gal-6 sulfotransferase 1	Chst1	7.68	-0.74	Cytoplasm	76969	
	elastin microfibril interfacier 2	Emilin2	7.6	-0.5	Extracellular	246707	
	wingless-type MMTV integration site family, 3A	Wnt3a	7.49	-0.36	Extracellular	24117	
	HF-SC	ADAM metallopeptidase with thrombospondin 19	<b>Adamts19</b>	10.23	-1.24	Extracellular	240322
		glycoprotein hormone alpha 2 von Willebrand factor A domain containing 2	Gpha2	10.11	-0.05	Extracellular	170458
			<b>Vwa2</b>	10.11	-2.2	Extracellular	240675
protein phosphatase 1, regulatory subunit 3C		Ppp1r3c	9.47	-1.44	Cytoplasm	53412	
sclerostin domain containing 1		Sostdc1	9.39	-1.45	Extracellular	66042	
glypican 3		Gpc3	8.75	-0.88	Membrane	14734	
connective tissue growth factor, Ctgf		<b>Ctgf</b>	2.06	-2.75	Extracellular	14219	
proline arginine-rich end leucine-rich repeat		<b>Prelp</b>	1.85	-3	Extracellular	116847	
inactive X specific transcripts, Xist		Xist	2.14	-2.96	Nucleus	213742	
cysteine rich protein 61, Cyr61		<b>Cyr61</b>	1.61	-3.01	Extracellular	16007	
sox9	Sox9	1.83	-0.89	Nucleus	20682		
TAC	S100 calcium binding protein A8 (calgranulin B)	S100a8	-	2.35	Cytoplasm	20201	
	S100 calcium binding protein A9 (calgranulin B)	S100a9	-	2.73	Cytoplasm	20202	
	chitinase 3-like 1 (Chi3l1), mRNA.	Chi3l1		2.17	Extacellular	12654	