

Table S27 - Exp. Blastocyst Female/Male DEGs

Gene	Symbol	GeneName	Chromosome	FPKM <sup>a</sup>		Exp. Blast	
				Female	Male	L2FC <sup>b</sup>	FDR <sup>c</sup>
ENSMMUG00000038331	RPS4Y1	Ribosomal Protein S4, Y-linked 1	Y	8.20	89.67	-7.26	2.25E-10
ENSMMUG00000038824	RPS4Y2	Ribosomal Protein S4, Y-linked 2	Y	7.38	77.16	-7.11	1.45E-08
ENSMMUG00000043715	EIF1AY	Eukaryotic Translation Initiation Factor 1A, Y-linked	Y	4.59	27.97	-3.68	4.98E-02
ENSMMUG00000043966	DDX3Y	DEAD-box Helicase 3, Y-linked	Y	3.34	21.29	-3.54	6.29E-07
ENSMMUG00000014258	FAM9C	Family With Sequence Similarity 9 Member C	X	2.12	0.08	4.37	1.36E-02
ENSMMUG00000046034			JSUE03158331.1	0.85	0.00	22.88	2.94E-02
ENSMMUG00000042420	PNMA2	PNMA Family Member 2	8	0.71	0.06	9.28	9.88E-03
ENSMMUG00000045991	USP9Y	Ubiquitin Specific Peptidase 9, Y-linked	Y	0.66	7.07	-3.47	7.77E-05
ENSMMUG00000038182	UTY	Ubiquitously Transcribed Tetratricopeptide Repeat Containing, Y-linked	Y	0.59	6.82	-4.84	2.31E-04
ENSMMUG00000045670			JSUE03320604.1	0.45	0.00	22.23	4.38E-02
ENSMMUG00000003144	KCNJ1	Potassium Voltage-gated Channel Subfamily J Member 1	14	0.37	0.00	5.99	2.75E-02
ENSMMUG00000047352			14	0.34	0.00	31.11	2.03E-25
ENSMMUG00000045017	KDM5D	Lysine Demethylase 5D	Y	0.33	2.07	-7.61	8.49E-05
ENSMMUG00000039683			JSUE03105675.1	0.32	0.00	22.71	3.21E-02
ENSMMUG00000008210	SRPX2	Sushi Repeat Containing Protein, X-linked 2	X	0.24	0.00	20.31	1.61E-08
ENSMMUG00000040516			X	0.23	0.01	13.87	1.58E-07
ENSMMUG00000021726	ASZ1	Ankyrin Repeat, SAM And Basic Leucine Zipper Domain Containing 1	3	0.22	0.00	16.41	2.65E-16
ENSMMUG00000045892			15	0.19	0.00	8.94	2.74E-02
ENSMMUG00000013751	OPN5	Opsin 5	4	0.18	0.00	18.49	1.08E-09
ENSMMUG00000041755			18	0.16	0.03	-12.17	1.27E-04
ENSMMUG00000045191	XKRX	XK Related, X-linked	X	0.15	0.00	26.42	7.68E-18
ENSMMUG00000044806			8	0.14	0.00	21.07	3.28E-11
ENSMMUG00000010405	FAM171B	Family With Sequence Similarity 171 Member B	12	0.13	4.00	-3.50	9.46E-03
ENSMMUG00000042957			2	0.11	0.00	16.67	4.65E-05
ENSMMUG00000004179	LIMS2	LIM Zinc Finger Domain Containing 2	12	0.08	0.01	5.29	4.83E-02
ENSMMUG00000040777	DBX1	Developing Brain Homeobox 1	14	0.08	0.00	17.59	5.03E-03
ENSMMUG00000014116	OR5A2	Olfactory Receptor, Family 5, Subfamily A, Member 2	14	0.07	0.00	24.85	5.16E-30
ENSMMUG00000046589			11	0.07	9.81	-17.68	1.59E-08
ENSMMUG00000039886			8	0.07	0.00	19.95	3.12E-11
ENSMMUG00000022734	LOC701233	Type-1 Protein Phosphatase Inhibitor 4	X	0.05	0.00	16.57	5.02E-11
ENSMMUG00000005591	LOC705142	Putative Methyl-CpG-binding Domain Protein 3-like 5	19	0.04	3.93	-5.70	2.13E-02
ENSMMUG00000002236	LMX1B	LIM Homeobox Transcription Factor 1 Beta	15	0.03	0.44	-8.87	6.47E-03
ENSMMUG00000048609			17	0.03	0.00	16.52	1.43E-16
ENSMMUG00000046533			6	0.03	0.00	14.10	2.94E-02
ENSMMUG00000009384	IGFBP4	Insulin Like Growth Factor Binding Protein 4	16	0.02	0.08	-12.32	2.48E-02
ENSMMUG00000043273			1	0.02	0.00	22.82	1.97E-06
ENSMMUG00000005870	DMTN	Dematin Actin Binding Protein	8	0.02	0.00	17.97	1.22E-11
ENSMMUG00000018571	CREB3L1	CAMP Responsive Element Binding Protein 3 Like 1	14	0.01	0.00	18.74	1.71E-14
ENSMMUG00000031636	C11H12orf74	Chromosome 11 Open Reading Frame, Human C12orf74	11	0.01	0.16	-15.70	2.42E-09
ENSMMUG00000013837	SHISA9	Shisa Family Member 9	20	0.01	0.00	15.37	4.89E-09
ENSMMUG00000000500	FNDC1	Fibronectin Type III Domain Containing 1	4	0.01	0.09	-6.33	4.36E-02
ENSMMUG00000042275			14	0.01	0.00	14.71	3.08E-02
ENSMMUG00000002553	CYP19A1	Cytochrome P450, Family 19, Subfamily A, Polypeptide 1	7	0.01	0.17	-6.34	1.05E-02
ENSMMUG00000011376	GPC5	Glypican 5	17	0.00	0.14	-6.54	4.97E-03
ENSMMUG00000045049	LOC106995304	Uncharacterized LOC106995304	X	0.00	0.01	-16.15	1.02E-06
ENSMMUG00000046542	LOC704641	Keratin-associated Protein 4-2	JSUE03156730.1	0.00	0.08	-21.06	4.29E-04
ENSMMUG00000040598	LOC106995531	Histone H2A-Bbd Type 2/3-like	JSUE03070105.1	0.00	0.47	-29.91	2.01E-04
ENSMMUG00000018363	CYP2B6	Cytochrome P450, Family 2, Subfamily B, Polypeptide 6	19	0.00	0.19	-26.79	1.73E-16

ENSMMUG00000021111	SIGLEC10	Sialic Acid Binding Ig Like Lectin 10	19	0.00	0.07	-14.52	8.50E-10
ENSMMUG00000020494			19	0.00	0.25	-21.28	4.29E-08
ENSMMUG00000040394			18	0.00	0.35	-30.19	3.62E-41
ENSMMUG00000039055			18	0.00	0.43	-23.10	1.83E-03
ENSMMUG00000021817	DCT	Dopachrome Tautomerase	17	0.00	0.06	-21.09	9.24E-20
ENSMMUG00000005847			17	0.00	0.02	-12.91	5.75E-07
ENSMMUG00000046375			17	0.00	0.01	-11.74	3.38E-02
ENSMMUG00000009995	ALOX15B	Arachidonate 15-lipoxygenase, Type B	16	0.00	0.00	-14.23	1.69E-08
ENSMMUG00000042689			15	0.00	0.14	-19.54	7.42E-09
ENSMMUG00000001827	PLPPR1	Phospholipid Phosphatase Related 1	15	0.00	0.03	-14.59	8.19E-07
ENSMMUG00000046827			15	0.00	0.18	-18.60	1.02E-02
ENSMMUG00000000018	MS4A10	Membrane Spanning 4-domains A10	14	0.00	0.01	-19.90	1.92E-14
ENSMMUG00000043454			14	0.00	0.63	-23.63	1.97E-02
ENSMMUG00000038367	SOX11	SRY-box 11	13	0.00	0.01	-28.81	6.49E-10
ENSMMUG00000048330			12	0.00	0.01	-24.51	2.65E-20
ENSMMUG00000038065			11	0.00	0.17	-31.98	5.86E-23
ENSMMUG00000043220			11	0.00	0.47	-19.89	5.78E-20
ENSMMUG00000032062	MANSC4	MANSC Domain Containing 4	11	0.00	0.23	-34.59	3.61E-06
ENSMMUG00000042668			10	0.00	0.12	-32.04	3.23E-68
ENSMMUG00000041493	LOC107000631	Uncharacterized LOC107000631	10	0.00	0.84	-30.93	3.48E-32
ENSMMUG00000006852	CRYBB3	Crystallin Beta B3	10	0.00	0.01	-17.41	1.69E-08
ENSMMUG00000031231	DEFB116	Defensin Beta 116	10	0.00	0.02	-13.43	9.53E-06
		Cytochrome P450, Family 2, Subfamily E, Polypeptide 1		0.00	0.01	-20.90	5.39E-22
ENSMMUG00000006339	CYP2E1		9				
ENSMMUG00000037671			9	0.00	0.09	-24.68	1.74E-20
ENSMMUG00000000148	PNLIP	Pancreatic Lipase	9	0.00	0.04	-18.56	1.54E-09
ENSMMUG00000046427			8	0.00	0.31	-16.28	8.61E-20
ENSMMUG00000008574	USP50	Ubiquitin Specific Peptidase 50	7	0.00	0.16	-33.15	3.92E-58
ENSMMUG00000012838	OTUD7A	OTU Deubiquitinase 7A	7	0.00	0.01	-28.51	7.71E-42
ENSMMUG00000041797			7	0.00	0.54	-23.86	1.08E-03
ENSMMUG00000002488			6	0.00	0.01	-27.96	6.16E-45
ENSMMUG000000022471			6	0.00	2.31	-32.23	1.65E-35
ENSMMUG00000048323			6	0.00	0.05	-14.42	2.90E-05
ENSMMUG00000038684			4	0.00	0.17	-22.59	4.22E-32
ENSMMUG00000042564			4	0.00	0.78	-23.80	1.68E-03
ENSMMUG00000039357			3	0.00	0.09	-18.13	7.04E-07
ENSMMUG00000042377			2	0.00	0.03	-17.93	3.19E-14
		Hes Related Family BHLH Transcription Factor With YRPW Motif-like		0.00	0.03	-29.65	8.25E-21
ENSMMUG00000018861	HEYL		1				
ENSMMUG00000019020	SLC2A7	Solute Carrier Family 2 Member 7	1	0.00	0.05	-24.59	1.21E-18
ENSMMUG00000039486			1	0.00	0.05	-29.65	2.79E-12
ENSMMUG00000031248			1	0.00	0.50	-33.90	1.15E-11
ENSMMUG00000027219	MIR554	MicroRNA 554	1	0.00	0.60	-30.67	1.11E-04

a) FPKM: Fragments Per Kilobase of transcript per Million mapped reads.

b) L2FC: Log fold change of base 2. Positive values indicate expression higher in female vs. male.

c) FDR: False discovery rate. Adjusted p-value using the Benjamin-Hochberg method.