

Supplemental Table S1. List of genes differentially expressed (Fold Change > 2, adjusted P < 0.05) between 2-cell embryos produced with control and ROS-treated sperm. RPKM: reads per kilobase of transcript model per million mapped reads.

ENSEMBL Gene ID	Gene symbol	Gene description	Control RPKM
ENSMMUG00000007395	BICD1	bicaudal D homolog 1 (Drosophila)	1.812
ENSMMUG00000009798	CTCF	CCCTC-binding factor (zinc finger protein)	19.162
ENSMMUG00000005164	OR10Q1	olfactory receptor, family 10, subfamily Q, member 1	11.052
ENSMMUG00000009612	FAM71F1	family with sequence similarity 71, member F1	6.724
ENSMMUG00000014579	PCDHB4	protocadherin beta 4	4.461
ENSMMUG00000021089	SFRP4	secreted frizzled-related protein 4	12.528
ENSMMUG00000006527	CALD1	caldesmon 1	9.281
ENSMMUG00000019291	DPYSL3	dihydropyrimidinase-like 3	2.848
ENSMMUG00000003061	CCDC80	coiled-coil domain containing 80	9.132
ENSMMUG00000004127	SHFM1	split hand/foot malformation (ectrodactyly) type 1	36.361
ENSMMUG00000000290	RBP1	retinol binding protein 1, cellular	22.301
ENSMMUG00000014782	STC2	stanniocalcin 2	13.435
ENSMMUG00000009953	NINL	ninein-like	3.464
ENSMMUG00000016040	RND3	Rho family GTPase 3	5.111
ENSMMUG00000012321	FN1	fibronectin 1	8.505
ENSMMUG00000005225	GJA1	gap junction protein, alpha 1, 43kDa	25.877
ENSMMUG00000004389	CDH18	cadherin 18, type 2	8.644
ENSMMUG00000017316	PIM1	pim-1 oncogene	22.905
ENSMMUG00000001484	LAMP2	lysosomal-associated membrane protein 2	22.823
ENSMMUG00000000123	NHSL1	NHS-like 1	9.043
ENSMMUG00000014009	TPM4	tropomyosin 4	137.561
ENSMMUG00000028834	SF4	splicing factor 4	30.442
ENSMMUG00000000706	FLNB	filamin B, beta (actin binding protein 278)	11.341
ENSMMUG00000013825	ATP6V0E1	ATPase, H ⁺ transporting, lysosomal 9kDa, V0 subunit e1	216.389
ENSMMUG00000010155	PRPF38B	PRP38 pre-mRNA processing factor 38 (yeast) domain containing B	104.933
ENSMMUG00000022456	JAZF1	JAZF zinc finger 1	8.506
ENSMMUG00000009172	MUC2	mucin 2, oligomeric mucus/gel-forming	41.94
ENSMMUG00000006026	SH3D19	SH3 domain containing 19	2.419
ENSMMUG00000023679	TRIM26	tripartite motif-containing 26	4.533
ENSMMUG00000009084	TM6SF1	transmembrane 6 superfamily member 1	2.304
ENSMMUG00000013751	OPN5	opsin 5	0.6
ENSMMUG00000009479	ASCC1	activating signal cointegrator 1 complex subunit 1	0.563
ENSMMUG00000004305	STK35	serine/threonine kinase 35	0.723
ENSMMUG00000019407	RIMS2	regulating synaptic membrane exocytosis 2	0.139

ENSMMUG00000030671	Uncharacterized protein		0.41
ENSMMUG00000019960	DHX16	DEAH (Asp-Glu-Ala-His) box polypeptide 16	0.013
ENSMMUG00000019634	RRP12	ribosomal RNA processing 12 homolog (S. cerevisiae)	0.01
ENSMMUG00000005144	NEK11	NIMA (never in mitosis gene a)- related kinase 11	0
ENSMMUG00000009515	CBLN3	cerebellin 3 precursor	0
ENSMMUG00000015707	PDGFRA	platelet-derived growth factor receptor, alpha polypeptide	0