

Table 6. Genes differentially expressed when compared with the IVF embryos

Comparison	Symbol	Seq. Identifier	UniGene ID*	Fold Δ^{\dagger}
Uniquely expressed genes: AI compared with IVF embryos $n = 123$				
Genes up-regulated in AI embryos				
		BM362914	Hs.525992	2.9
	<i>FBXO32</i>	AW464353	Hs.403933	2.8
	<i>TOMM7</i>	BM366715	Hs.112318	2.8
		BM364527	Bt.10140	2.7
	<i>C3orf6</i>	BF045000	Hs.55098	2.7
	<i>FKSG28</i>	BM364614	Hs.512762	2.6
		BF042812	Bt.23339	2.6
		BM364571	Hs.525992	2.6
	<i>DAB2</i>	BF040210	Hs.81988	2.5
		BF042933	TC194220	2.5
	<i>EPHX2</i>	BF046427	Hs.212088	2.5
	<i>LOC112840</i>	BF039946	Hs.22268	2.4
	<i>SLCIA3</i>	BF042208	Hs.371369	2.4
		BM364635		2.4
	<i>KAI1</i>	BM364563	Hs.323949	2.4
	<i>SULT1E1</i>	BF044128	Hs.54576	2.4
	<i>SH120</i>	BF044826	Hs.504478	2.4
	<i>CD48</i>	BF043735	Hs.901	2.3
	<i>FUK</i>	BF045361	Hs.7907	2.3
	<i>LSM8</i>	BF043473	Hs.446179	2.3
	<i>ADNP</i>	BM365941	Hs.448540	2.3
		AW464537	TC213518	2.3
	<i>FLJ11184</i>	BF045538	Hs.267446	2.3
	<i>LRP2</i>	BF042084	Hs.252938	2.2
	<i>RPL35A</i>	BF045042	Hs.289093	2.2
		AW462522		2.2
	<i>RIC1</i>	AW463851	Hs.203605	2.2
		BF041595	Bt.22712	2.2
	<i>KIAA0767</i>	BF039242	Hs.95180	2.2
	<i>HADH2</i>	AW465125	Hs.171280	2.2
		BM366203	Bt.13757	2.2
	<i>HSGP25L2G</i>	BM366458	Hs.279929	2.2
		BF043988	TC211858	2.2
	<i>C9orf5</i>	AW465543	Hs.418097	2.2
	<i>SRF</i>	BF039881	Hs.444086	2.2
	<i>PAI-RBP1</i>	BM366101	Hs.356427	2.2
		BF045485		2.2
	<i>SPC12</i>	BF045672	Hs.11125	2.2
	<i>HP1-BP74</i>	BM362315	Hs.142442	2.2
	<i>KIAA0373</i>	BF044427	Hs.150444	2.1
	<i>LAT</i>	BM364562	Hs.498997	2.1
	<i>SMP1</i>	AW465914	Hs.475792	2.1
	<i>SMC1L1</i>	BF046644	Hs.211602	2.1
	<i>CBFA2T2</i>	AW464623	Hs.153934	2.1
	<i>NUDC</i>	BM365709	Hs.263812	2.1
	<i>LOC124491</i>	BF044455	Hs.487510	2.1
	<i>FLJ20696</i>	BM364565	Hs.236844	2.1
	<i>PDGFRA</i>	BM362352	Hs.74615	2.1

<i>FLJ10853</i>	BF046465	Hs.445512	2.1
<i>COX17</i>	BM362515	Hs.16297	2.1
<i>CBX1</i>	BF044531	Hs.77254	2.1
<i>PPP1R13B</i>	BF040615	Hs.371546	2.1
<i>PPIH</i>	BF043671	Hs.9880	2.1
<i>FABP3</i>	BM363051	Hs.112669	2.1
<i>STMN1</i>	BF042135	Hs.209983	2.1
<i>KIAA0251</i>	BF041627	Hs.439211	2.1
	BM361857	Hs.448626	2
<i>MGC14817</i>	AW464175	Hs.504820	2
	AW462726	Bt.22747	2
<i>MGC2650</i>	BF042119	Hs.386422	2
<i>CASP6</i>	AW464593	Hs.3280	2
<i>DAPP1</i>	BF043679	Hs.62643	2
<i>TIGD2</i>	BF040734	Hs.58924	2
	BF041590	Hs.197076	2
<i>QP-C</i>	BF039168	Hs.146602	2
<i>MAPBPIP</i>	BF042143	Hs.351629	2
<i>GNG11</i>	BM361956	Hs.83381	2
<i>SE57-1</i>	AW463203	Hs.30315	2

Genes up-regulated in IVF embryos

<i>FZD4</i>	AW464374	Hs.19545	3.5
<i>PFKFB3</i>	AW465288	Hs.195471	3.2
	BF041155	Bt.24251	3
<i>AFG3L1</i>	BF044093	Hs.337620	2.9
<i>ZNF75</i>	BF043271	Hs.355015	2.9
<i>ITSN2</i>	BM366528	Hs.444708	2.8
<i>SGPL1</i>	BF045752	Hs.186613	2.8
<i>SERPINE1</i>	BF044893	Hs.414795	2.8
	BF044908	Bt.17347	2.7
<i>GPR64</i>	AW461648	Hs.421137	2.6
<i>ANKRD1</i>	AW464818	Hs.448589	2.6
<i>P15RS</i>	BF041744	Hs.300906	2.6
	BF044557	Bt.19405	2.5
	AW463292	Hs.527733	2.5
<i>GFPT1</i>	BF045423	Hs.1674	2.5
<i>DAP</i>	AW465882	Hs.75189	2.4
<i>KIAA0063</i>	BF042858	Hs.3094	2.4
<i>LIPH</i>	AW462817	Hs.68864	2.4
<i>IL15RA</i>	AW462714	Hs.12503	2.4
<i>CHS1</i>	AW462482	Hs.130188	2.4
<i>DUSP1</i>	AW464709	Hs.171695	2.4
<i>LPP</i>	BF046650	Hs.180398	2.3
<i>KIAA0063</i>	BF042961	Hs.3094	2.3
<i>RGS12</i>	BF044618	Hs.434933	2.3
<i>ELF1</i>	AW463979	Hs.124030	2.3
<i>GATA3</i>	BF046526	Hs.169946	2.3
<i>ARHGEF5</i>	BF042105	Hs.334	2.3
<i>LOC90826</i>	BM362608	Hs.29645	2.3
<i>KIAA1598</i>	BF046130	Hs.98002	2.2
<i>SCA2</i>	BF041270	Hs.76253	2.2
<i>LAMB1</i>	AW463880	Hs.122645	2.2

<i>STAM</i>	BF040813	Hs.441498	2.2
<i>C7orf2</i>	BF043945	Hs.397295	2.1
<i>TEX27</i>	AW462751	Hs.6120	2.1
<i>ZFP36</i>	AW462140	Hs.343586	2.1
<i>SSH2</i>	BF046189	Hs.25127	2.1
<i>PGM3</i>	BF046419	Hs.237323	2.1
<i>DMTF1</i>	BF046571	Hs.129506	2.1
	AW465481		2.1
<i>BS69</i>	BF040504	Hs.145894	2.1
<i>CBL</i>	BF043814	Hs.41324	2.1
<i>PRDM4</i>	BF046524	Hs.21807	2.1
<i>AP2B1</i>	BF046011	Hs.370123	2.1
<i>ABCD3</i>	BF042967	Hs.76781	2
	BF039352		2
<i>DKFZp762I137</i>	BM365552	Hs.201648	2
<i>KIAA0196</i>	AW461532	Hs.437991	2
<i>SENP5</i>	BF045812	Hs.13138	2
	BF044685	Hs.284192	2
<i>PTPLB</i>	AW464130	Hs.5957	2
<i>HNRPA2B1</i>	BF044057	Hs.232400	2
<i>LDHA</i>	AW464637	Hs.2795	2
<i>ARHB</i>	AW464871	Hs.406064	2
<i>ARHGAP21</i>	BF041260	Hs.414164	2
<i>BHD</i>	AW465536	Hs.396533	2

Uniquely expressed genes: IVF compared with NT embryos $n=67$

Genes up-regulated in NT embryos

	BF040607	Hs.43744	3.5
<i>IPO7</i>	BF045355	Hs.434408	3.2
	BF040483	TC202969	2.7
	BM364859	Hs.458365	2.6
<i>SUCLG2</i>	AW461539	Hs.446476	2.6
<i>IL1RN</i>	AW464284	Hs.81134	2.5
<i>TXNIP</i>	AW462086	Hs.179526	2.5
<i>ZADH1</i>	BF045231	Hs.98365	2.4
<i>EIF4A2</i>	BF040878	Hs.511904	2.4
<i>HNRPH3</i>	BF041471	Hs.156481	2.4
<i>ACVR2</i>	BF039418	Hs.389846	2.3
<i>RNASEH2A</i>	BF044821	Hs.25292	2.3
<i>SNX12</i>	AW465072	Hs.260750	2.3
<i>FLJ22679</i>	AW462688	Hs.5472	2.2
<i>CGI-79</i>	BM364884	Hs.61184	2.2
<i>FLJ12525</i>	BF044559	Hs.356573	2.2
<i>MKKS</i>	BM362051	Hs.46743	2.2
<i>PLCB4</i>	BF044560	Hs.151408	2.2
<i>BCAS2</i>	BF040123	Hs.22960	2.1
	BF041434		2.1
<i>SDHC</i>	AW465250	Hs.433982	2.1
<i>KIAA0036</i>	AW465525	Hs.435802	2.1
<i>TP53INP1</i>	BF043124	Hs.75497	2.1
<i>ADPRT</i>	BF044761	Hs.177766	2.1
<i>C6orf119</i>	AW465061	Hs.80624	2.1
<i>IL13RA1</i>	BF040232	Hs.285115	2.1

<i>LOC92345</i>	BF045548	Hs.332844	2.1
<i>HNRPA1</i>	AW464603	Hs.356721	2.1
<i>CGI-94</i>	AW465760	Hs.111449	2.1
<i>NOL5A</i>	BM365616	Hs.376064	2.1
<i>SET</i>	BF045176	Hs.436687	2.1
<i>NDUFA2</i>	BM362349	Hs.163867	2
	AW463696	Bt.21510	2
<i>ZDHHC5</i>	AW466083	Hs.27239	2
<i>MGC52022</i>	AW465110	Hs.175804	2
<i>na</i>	BF041656	Hs.449674	2
	AW462445		2
<i>SARS</i>	BF042850	Hs.444261	2
<i>HSPC155</i>	BF040591	Hs.301412	2
<i>AGA</i>	AW462575	Hs.207776	2
<i>Rdh11</i>	BF039125	Mm.291799	2

Genes up-regulated in IVF embryos

<i>PARG1</i>	BF043143	Hs.430919	3.5
	BF044626	Hs.519290	3.1
<i>DNAJB1</i>	BF042255	Hs.82646	2.8
<i>HMGR</i>	AW463319	Hs.11899	2.5
	AW465971	Hs.325100	2.5
<i>SC4MOL</i>	BF045613	Hs.393239	2.5
<i>ABCC2</i>	AW465042	Hs.193852	2.5
<i>RNPC2</i>	BF040025	Hs.282901	2.4
<i>TMG4</i>	BF041033	Hs.471695	2.4
<i>HTLF</i>	AW465980	Hs.103126	2.3
<i>PFTK1</i>	BF046716	Hs.57856	2.3
<i>FLJ22662</i>	AW463050	Hs.178470	2.3
<i>DSC2</i>	AW464398	Hs.95612	2.3
<i>GAB1</i>	BF046579	Hs.80720	2.2
	BF042686	Hs.432984	2.2
	BF040852		2.1
<i>PIK3AP1</i>	BM362742	Hs.374836	2.1
<i>C1orf17</i>	AW466105	Hs.387995	2.1
<i>ETV5</i>	BF039090	Hs.43697	2.1
<i>BCAR3</i>	BF043710	Hs.201993	2.1
<i>GCH1</i>	BF039694	Hs.86724	2.1
	AW464533	Hs.486963	2
<i>CT120</i>	BF042133	Hs.154396	2
	BF043269	Bt.262	2
<i>GADD45A</i>	AW465978	Hs.80409	2
<i>MGC32065</i>	BM366294	Hs.8705	2

Uniquely expressed genes in IVF embryos *n* =58

	BF041028	TC212143	
	BM362357	Bt.20905	
	BF041965	Bt.22285	
	AW461434	Bt.262	
	BF044039	TC194474	
	BF043689	Bt.18283	
	AW464517	Bt.22607	
<i>AB026190</i>	AW465280	Hs.106290	
<i>ABCA1</i>	BF040532	Hs.147259	

<i>CD59</i>	BF040446	Hs.278573
<i>COX7A2</i>	BF039921	Hs.70312
<i>CT120</i>	BF039086	Hs.154396
<i>DOC1</i>	BF046207	Hs.15432
<i>EGR1</i>	AW465088	Hs.326035
<i>EIF4A1</i>	AW466024	Hs.129673
<i>HDCMA18P</i>	BM366104	Hs.278635
<i>HES1</i>	AW465398	Hs.250666
<i>HMOX1</i>	BM364921	Hs.202833
<i>HNRPA2B1</i>	AW464917	Hs.232400
<i>HNRPC</i>	BF041354	Hs.476302
<i>HSD3B1</i>	BF043416	Hs.364941
<i>HSPA1B</i>	AW464005	Hs.274402
<i>HSPB8</i>	BM364661	Hs.111676
<i>HSPCA</i>	BF041278	Hs.446579
<i>HSPE1</i>	BF039685	Hs.1197
<i>IFI35</i>	BM366707	Hs.50842
<i>IQGAP1</i>	BF040382	Hs.1742
<i>KIAA0033</i>	AW464100	Hs.174905
<i>KIAA1128</i>	BF043762	Hs.81897
<i>MADP-1</i>	BF046567	Hs.43847
<i>MGC16063</i>	BM366713	Hs.410491
<i>MYLIP</i>	BF045523	Hs.443793
<i>na</i>	BF044446	Mm.300203
<i>NAP1L4</i>	AW464388	Hs.269403
<i>NASP</i>	BF039280	Hs.446206
<i>NDUFB9</i>	BF042526	Hs.15977
<i>NIP30</i>	BM365995	Hs.285017
<i>NOLA1</i>	AW463985	Hs.69851
<i>PA2G4</i>	BM365432	Hs.374491
<i>PABPN1</i>	BF040928	Hs.117176
<i>PFDN2</i>	AW465585	Hs.298229
<i>PLAU</i>	AW462038	Hs.77274
<i>PSID</i>	BF045707	Hs.54971
<i>PTP4A2</i>	AW462951	Hs.82911
<i>PTPRF</i>	AW465468	Hs.75216
<i>SFN</i>	AW465454	Hs.184510
<i>SH3BGRL</i>	BF046438	Hs.14368
<i>SON</i>	BF046366	Hs.430541
<i>SYNCRIP</i>	BF042093	Hs.436376
<i>TM4SF12</i>	BF045969	Hs.16529
<i>TXNRD1</i>	BM362012	Hs.434367
<i>UBL1</i>	AW465185	Hs.81424
<i>UBTF</i>	BM365198	Hs.89781
<i>UPF3B</i>	AW466034	Hs.103832
<i>VprBP</i>	AW464947	Hs.118738
<i>WIRE</i>	BF039273	Hs.421622
<i>WSB2</i>	AW465418	Hs.459470
<i>ZNF146</i>	BF040005	Hs.301819

*Some sequences do not have human/mouse UniGene IDs and are annotated with Cattle UniGene/TIGR names or are previously unannotated bovine sequences.

†Fold change represents the ratio of the ratios of each embryo type to the standard reference.