

Table S28 - IPA canonical pathways comparing female vs. male at morula and blastocyst stages

Canonical_Pathways	p-value <sup>a</sup>	DEGs Up	DEGs Down	DEGs Total	Cell Stage
VDR/RXR Activation	2.51E-02	1	1	2	Morula
$\alpha$ -Adrenergic Signaling	3.09E-02	0	2	2	Morula
Neuregulin Signaling	3.16E-02	0	2	2	Morula
VEGF Family Ligand-Receptor Interactions	3.16E-02	0	2	2	Morula
Crosstalk between Dendritic Cells and Natural Killer Cells	3.24E-02	0	2	2	Morula
Altered T Cell and B Cell Signaling in Rheumatoid Arthritis	3.24E-02	1	1	2	Morula
Bupropion Degradation	1.26E-05	0	3	3	Blastocyst
Acetone Degradation I (to Methylglyoxal)	2.19E-05	0	3	3	Blastocyst
Estrogen Biosynthesis	5.75E-05	0	3	3	Blastocyst
Nicotine Degradation III	1.45E-04	0	3	3	Blastocyst
Melatonin Degradation I	2.29E-04	0	3	3	Blastocyst
Nicotine Degradation II	2.29E-04	0	3	3	Blastocyst
Superpathway of Melatonin Degradation	2.82E-04	0	3	3	Blastocyst
Regulation of eIF4 and p70S6K Signaling	3.31E-02	0	2	2	Blastocyst
Hepatic Fibrosis / Hepatic Stellate Cell Activation	4.57E-02	0	2	2	Blastocyst

a) The p-value: statistical overlap of differentially expressed gene list and gene set