

SUPPLEMENTAL TABLE 1

Enriched functional annotations (GO BP level 3) among the 7063 transcripts regulated in hESCs upon ¹³¹I exposure

Term	Count	%	P-Value	Benjamini
nervous system development	169	3.4	1.60E-11	4.30E-09
cell proliferation	178	3.6	4.70E-09	6.30E-07
cell cycle	224	4.5	7.40E-09	6.60E-07
cell organization and biogenesis	425	8.6	3.40E-08	2.30E-06
regulation of cellular physiological process	855	17.3	2.20E-07	1.20E-05
negative regulation of cellular process	207	4.2	9.40E-06	4.20E-04
regulation of body fluids	44	0.9	2.60E-05	1.00E-03
circulation	45	0.9	3.10E-05	1.00E-03
negative regulation of physiological process	192	3.9	4.00E-05	1.20E-03
organ morphogenesis	74	1.5	6.20E-05	1.70E-03
primary metabolism	1797	36.4	6.60E-05	1.60E-03
blood coagulation	37	0.7	1.40E-04	3.10E-03
muscle contraction	53	1.1	1.90E-04	3.90E-03
neuron differentiation	39	0.8	1.90E-04	3.70E-03
positive regulation of cellular process	155	3.1	2.30E-04	4.10E-03
vasculature development	30	0.6	3.40E-04	5.70E-03
muscle development	38	0.8	5.30E-04	8.30E-03
skeletal development	48	1	5.80E-04	8.60E-03
regulation of signal transduction	72	1.5	6.50E-04	9.10E-03
cell division	59	1.2	7.50E-04	1.00E-02
cell homeostasis	53	1.1	9.20E-04	1.20E-02
cell development	42	0.9	1.10E-03	1.40E-02
positive regulation of physiological process	134	2.7	1.20E-03	1.30E-02
cellular morphogenesis	84	1.7	1.20E-03	1.30E-02
establishment of localization	737	14.9	1.70E-03	1.80E-02
localization of cell	73	1.5	2.10E-03	2.10E-02
cell motility	73	1.5	2.10E-03	2.10E-02
cellular metabolism	1831	37.1	2.80E-03	2.60E-02
nitrogen compound metabolism	111	2.2	4.30E-03	3.90E-02
regulation of metabolism	618	12.5	4.40E-03	3.90E-02
cellular localization	165	3.3	5.00E-03	4.30E-02
ion homeostasis	47	1	5.30E-03	4.30E-02
regulation of transferase activity	44	0.9	6.40E-03	5.10E-02
response to oxidative stress	21	0.4	8.30E-03	6.30E-02
macromolecule metabolism	1106	22.4	1.10E-02	8.10E-02
response to wounding	108	2.2	1.30E-02	9.40E-02
response to DNA damage stimulus	73	1.5	1.60E-02	1.10E-01
response to extracellular stimulus	11	0.2	2.40E-02	1.60E-01
transport	661	13.4	3.30E-02	2.00E-01
sensory perception of mechanical stimulus	31	0.6	3.30E-02	2.00E-01
response to chemical stimulus	103	2.1	3.80E-02	2.30E-01
mesoderm development	13	0.3	4.20E-02	2.40E-01
cell-cell signaling	137	2.8	4.70E-02	2.60E-01
cell death	147	3	4.70E-02	2.60E-01
signal transduction	749	15.2	4.90E-02	2.60E-01
embryonic development (sensu Metazoa)	11	0.2	5.40E-02	2.80E-01

muscle cell differentiation	8	0.2	5.90E-02	2.90E-01
regulation of embryonic development	4	0.1	7.40E-02	3.50E-01
brain development	14	0.3	8.20E-02	3.70E-01
RNA localization	16	0.3	8.70E-02	3.90E-01
cell growth	43	0.9	9.60E-02	4.10E-01
extracellular matrix organization and biogenesis	15	0.3	9.90E-02	4.20E-01
