

Gene Ontology analysis of significantly expressed genes in differentiating ESCs.

function	type	Enrichment Score	Enrichment p-value	# genes in list, in group	# genes not in list, in group	GO ID
regulation of cell cycle	biological process	23,3101	7,53E-11	74	523	51726
cell cycle	biological process	22,1864	2,32E-10	69	483	7049
regulation of cell cycle process	biological process	19,5492	3,24E-09	48	294	10564
cell cycle process	biological process	16,8891	4,63E-08	69	558	22402
negative regulation of mitotic cell cycle phase transition	biological process	15,2255	2,44E-07	18	61	1901991
negative regulation of cell cycle phase transition	biological process	14,4822	5,13E-07	24	113	1901988
negative regulation of cell cycle process	biological process	13,8296	9,86E-07	27	145	10948
regulation of mitotic cell cycle phase transition	biological process	12,9364	2,41E-06	22	107	1901990
regulation of cell cycle phase transition	biological process	12,7133	3,01E-06	27	155	1901987
positive regulation of cell cycle process	biological process	12,3013	4,55E-06	21	103	90068
regulation of mitotic cell cycle	biological process	11,596	9,20E-06	31	207	7346
negative regulation of G1/S transition of mitotic cell cycle	biological process	10,9335	1,78E-05	9	20	2000134
cell cycle checkpoint	biological process	9,66824	6,33E-05	18	97	75
regulation of G1/S transition of mitotic cell cycle	biological process	9,59873	6,78E-05	12	46	2000045
mitotic cell cycle checkpoint	biological process	9,59873	6,78E-05	12	46	7093
regulation of ubiquitin-protein ligase activity involved in mitotic cell cycle	biological process	8,94767	0,00013004	4	2	51439
positive regulation of cell cycle arrest	biological process	8,92074	0,00013359	8	21	71158
regulation of cell cycle arrest	biological process	6,75248	0,00116798	8	31	71156
regulation of cell cycle checkpoint	biological process	5,39757	0,00452755	4	9	1901976
cell cycle phase transition	biological process	5,38027	0,00460658	11	69	44770
mitotic cell cycle phase transition	biological process	5,38027	0,00460658	11	69	44772
negative regulation of cell cycle	biological process	5,02726	0,00655672	18	152	45786
positive regulation of cell cycle	biological process	4,60781	0,00997362	13	100	45787
regulation of metaphase/anaphase transition of cell cycle	biological process	4,5093	0,0110062	5	20	1902099
negative regulation of ubiquitin-protein ligase activity involved in mitotic cell cycle	biological process	4,06442	0,017173	2	2	51436
G2/M transition of mitotic cell cycle	biological process	3,75084	0,023498	5	25	86
cell cycle phase	biological process	3,70066	0,0247072	6	35	22403
DNA damage response, signal transduction by p53 class mediator resulting in cell cycle arrest	biological process	3,43563	0,032205	3	10	6977
signal transduction involved in mitotic cell cycle checkpoint	biological process	3,43563	0,032205	3	10	72413
signal transduction involved in cell cycle checkpoint	biological process	3,23565	0,0393347	3	11	72395
regulation of mitotic cell cycle spindle assembly checkpoint	biological process	3,22258	0,039852	2	4	90266
positive regulation of cell cycle checkpoint	biological process	3,22258	0,039852	2	4	1901978
positive regulation of metaphase/anaphase transition of cell cycle	biological process	3,22258	0,039852	2	4	1902101
negative regulation of metaphase/anaphase transition of cell cycle	biological process	3,05355	0,0471913	3	12	1902100