

Table S1: Gene Ontology pathways over-represented in the list of IR-regulated genes

Pvalue	ExpCount	Count	Term
0	3	26	cell cycle
0	1	19	mitotic cell cycle
0	1	16	mitosis
0	1	16	M phase of mitotic cell cycle
0	2	20	cell cycle process
0	1	16	M phase
0	1	15	cell division
0	2	17	cell cycle phase
0	1	11	microtubule-based process
0	0	7	microtubule cytoskeleton organization and biogenesis
0	0	4	spindle organization and biogenesis
0	0	6	microtubule-based movement
0	2	11	cytoskeleton organization and biogenesis
0	1	6	cytoskeleton-dependent intracellular transport
0	0	4	cell cycle checkpoint
0	0	4	regulation of mitotic cell cycle
0	4	12	apoptosis
0	4	12	programmed cell death
0	0	3	DNA damage checkpoint
0	0	3	DNA integrity checkpoint
0	4	12	cell death
0	4	12	death
0	1	7	regulation of cell cycle
0	0	3	mitotic cell cycle checkpoint
0.001	1	7	response to DNA damage stimulus
0.001	5	14	cell development
0.001	0	2	mitotic spindle organization and biogenesis
0.001	0	3	DNA damage response, signal transduction
0.002	0	3	regulation of cyclin-dependent protein kinase activity
0.002	5	13	organelle organization and biogenesis
0.002	2	7	response to endogenous stimulus
0.003	0	2	G2/M transition of mitotic cell cycle
0.003	0	3	chromosome segregation
0.003	3	9	intracellular transport
0.004	1	5	negative regulation of cell proliferation
0.005	0	1	positive regulation of non-apoptotic programmed cell death
0.006	1	5	regulation of transferase activity
0.007	2	7	regulation of cell proliferation
0.007	0	3	cell cycle arrest
0.008	0	3	interphase of mitotic cell cycle
0.008	4	9	cell proliferation
0.009	0	2	mitotic sister chromatid segregation
0.009	0	3	interphase
0.009	0	2	sister chromatid segregation
0.01	0	1	mitotic spindle elongation
0.01	0	1	mitotic chromosome movement towards spindle pole

0.01	0	1	mitotic cell cycle G2/M transition DNA damage checkpoint
0.01	0	1	establishment and/or maintenance of microtubule cytoskeleton polarity
0.01	0	1	establishment and/or maintenance of cytoskeleton polarity
0.01	0	1	spindle elongation
0.01	0	1	chromosome movement towards spindle pole
0.01	0	1	regulation of hair follicle development
0.01	0	1	positive regulation of hair follicle development
0.01	0	1	regulation of telomerase activity
0.01	0	1	negative regulation of telomerase activity
0.01	4	9	regulation of developmental process