

Supplementary data table 2: Overrepresented GO-terms. For each GO-term the GO-identifier (GOid), p-value (from the hypergeometric t-test (uncorrected values)), gene count, and the index number referring to Fig 3A are listed.

GOid	GOterm	P.value	Gene count	Index (GO-tree)
GO:0007049	cell cycle	6.3e-37	83	1
GO:0000278	mitotic cell cycle	9.1e-31	45	2
GO:0051301	cell division	1.8e-28	40	3
GO:0000279	M phase	3.0e-27	41	4
GO:0007067	mitosis	5.5e-27	37	5
GO:0000087	M phase of mitotic cell cycle	9.0e-27	37	6
GO:0006260	DNA replication	1.6e-25	36	7
GO:0006259	DNA metabolism	1.7e-20	57	8
GO:0007051	spindle organization and biogenesis	3.5e-18	14	9
GO:0007017	microtubule-based process	3.5e-16	26	10
GO:0006261	DNA-dependent DNA replication	9.2e-16	20	11
GO:0000074	regulation of progression through cell cycle	3.5e-15	43	12
GO:0051726	regulation of cell cycle	4.4e-15	43	13
GO:0000226	microtubule cytoskeleton organization and biogenesis	2.0e-12	15	14
GO:0000075	cell cycle checkpoint	2.1e-11	13	15
GO:0006270	DNA replication initiation	2.4e-11	10	16
GO:0006996	organelle organization and biogenesis	3.1e-11	52	17
GO:0006974	response to DNA damage stimulus	1.2e-10	26	18
GO:0006281	DNA repair	1.4e-10	24	19
GO:0043283	biopolymer metabolism	5.6e-10	102	20
GO:0009719	response to endogenous stimulus	6.1e-10	26	21
GO:0007059	chromosome segregation	1.0e-09	11	22
GO:0043170	macromolecule metabolism	1.7e-09	137	23
GO:0050875	cellular physiological process	2.8e-09	249	24
GO:0016043	cell organization and biogenesis	2.9e-09	70	25
GO:0007010	cytoskeleton organization and biogenesis	5.0e-09	29	26

GO:0007088	regulation of mitosis	5.4e-09	11	27
GO:0030705	cytoskeleton-dependent intracellular transport	7.8e-09	15	28
GO:0007018	microtubule-based movement	7.8e-09	14	29
GO:0051329	interphase of mitotic cell cycle	9.2e-08	11	30
GO:0051325	interphase	1.6e-07	11	31
GO:0048015	phosphoinositide-mediated signaling	2.0e-07	12	32
GO:0051649	establishment of cellular localization	7.4e-07	34	33
GO:0051641	cellular localization	1.0e-06	34	34
GO:0006139	nucleobase, nucleoside, nucleotide and nucleic acid metabolism	2.7e-06	107	35
GO:0009117	nucleotide metabolism	5.8e-06	16	36
GO:0009165	nucleotide biosynthesis	8.8e-06	13	37
GO:0044238	primary metabolism	1.6e-05	181	38
GO:0046907	intracellular transport	3.1e-05	30	39
GO:0044237	cellular metabolism	3.4e-05	183	40
GO:0007582	physiological process	4.6e-05	257	41
GO:0051276	chromosome organization and biogenesis	6.2e-05	19	42
GO:0008152	metabolism	1.2e-04	190	43
GO:0008283	cell proliferation	2.8e-04	26	44
GO:0019932	second-messenger-mediated signaling	6.3e-04	13	45