

Pathways	#	CDK2	CCNE1	BRCA1	CCNE2	CDK1	CCND1	CHEK1	E2F2	E2F5	CCNB1	CDC25A	CDC25C	CDK6	SKP2	CCNB2	CCND2	PPM1J	SFN	TGFB3	MYC	PCNA	PLK1	SMAD4	CCNA2	FANCD2	RFC5,SLC19A1	AURKA	BLM	CDKN2D	FAS	FOXO1	FZD7	HDAC11	KAT2B	MSH6	PKMYT1	PRKCA	SMARCA4	SUV39H1	TGFB2								
Cell Cycle: G2/MDNA Damage Checkpoint Regulation	12																																																
Cell Cycle: G1/S Checkpoint Regulation	17																																																
Cyclins and Cell Cycle Regulation	19																																																
Estrogen-mediated S-phase Entry	11																																																
Mitotic Roles of Polo-Like Kinase	8																																																
Cell Cycle Control of Chromosomal Replication	2																																																
Aryl Hydrocarbon Receptor Signaling	12																																																
GADD45 Signaling	9																																																
Role of BRCA1 in DNA Damage Response	10																																																
Role of CHK Proteins in Cell Cycle Checkpoint Control	12																																																
Hereditary Breast Cancer Signaling	14																																																
DNA damage-induced 14-3-3 $\sigma$ Signaling	8																																																
ATM Signaling	10																																																
Antiproliferative Role of TOB in T Cell Signaling	8																																																
Molecular Mechanisms of Cancer	24																																																
Mismatch Repair in Eukaryotes	3																																																
BER pathway	1																																																
p53 Signaling	9																																																
Cell Cycle Regulation by BTG Family Proteins	7																																																
Small Cell Lung Cancer Signaling	12																																																
Breast Cancer Regulation by Stathmin1	8																																																
Glioblastoma Multiforme Signaling	9																																																
Factors Promoting Cardiogenesis in Vertebrates	8																																																
Role of Oct4 in Mammalian Embryonic Stem Cell Pluripotency	1																																																
HIPPO signaling	4																																																

**Additional file 9:  
Figure S6**