

A

Validated E2F target genes (regulated and bound by E2F transcription factors)					
ASF1B	CDC25A	E2F3	LMNB1	PLK1	RRM1
BARD1	CDC6	FANCL	MAP3K5	POLD3	SERPINE1
BLM	CDC7	FEN1	MCM3	PRC1	SMC2
BNIP3	CDCA3	H2AFX	MKI67	RACGAP1	SSX2IP
BOK	CDCA5	HIST1H2AD	NASP	RAD51	TK1
BRCA1	CENPF	HMGB2	NRP1	RAD51AP1	TMPO
BUB1	CENPK	HMMR	NUF2	RAD54L	TOP2A
BUB1B	DLG7	IQGAP3	PBK	RBL1	TPX2
CCDC5	DNA2L	KIF20A	PBX3	RFC3	TYMS
CCNA2	E2F1	KIF2C	PCNA	RFC4	UBE2C

B

GO category	GO ontology	GO term	Number of genes	Genes up in TKO	LS permutation p-value	KS permutation p-value
GO:0000776	CC	kinetochore	48	30	0.00001	0.00001
GO:0003899	MF	DNA-directed RNA polymerase activity	71	43	0.00001	0.00001
GO:0019205	MF	nucleobase, nucleoside, nucleotide kinase activity	63	35	0.00001	0.0000972
GO:0030935	CC	sheet-forming collagen	12	0	0.00001	0.0003072
GO:0030894	CC	replisome	22	13	0.00001	0.0003131
GO:0043596	CC	nuclear replication fork	22	13	0.00001	0.0003131
GO:0043601	CC	nuclear replisome	22	13	0.00001	0.0003131
GO:0005657	CC	replication fork	55	36	0.00001	0.0004025
GO:0006270	BP	DNA replication initiation	26	24	0.0000968	0.0000995
GO:0006305	BP	DNA alkylation	48	27	0.0000975	0.00001
GO:0006306	BP	DNA methylation	48	27	0.0000975	0.00001
GO:0019202	MF	amino acid kinase activity	5	0	0.0000995	0.0004817
GO:0006304	BP	DNA modification	54	29	0.0004371	0.0000952
GO:0019218	BP	regulation of steroid metabolic process	22	10	0.000822	0.00033