



Mitotic Prometaphase Amplification of signal from unattached kinetochores via a MAD2 inhibitory signal Resolution of Sister Chromatid Cohesion SUMOylation of DNA replication proteins RHO GTPases Activate Formins Separation of Sister Chromatids Regulation of TP53 Activity through Phosphorylation Aflatoxin activation and detoxification Rho GTPase cycle APC/C:Cdh1 mediated degradation of Cdc20 and other APC/C:Cdh1 targeted proteins in late mitosis/early G1 Heme biosynthesis ılates transcription of several additional cell death genes whose specific roles in p53–dependent apoptosis remain uncertain TP53 Regulates Transcription of Genes Involved in G2 Cell Cycle Arrest
Netrin-1 signaling Mitochondrial Fatty Acid Beta-Oxidation Inactivation of APC/C via direct inhibition of the APC/C complex Branched-chain amino acid catabolism APC/C:Cdc20 mediated degradation of mitotic proteins Advanced glycosylation endproduct receptor signaling Transcriptional Regulation by E2F6 TRAF6 mediated NF-kB activation TAK1 activates NFkB by phosphorylation and activation of IKKs complex RHO GTPases Activate WASPs and WAVEs Resolution of D-loop Structures through Synthesis-Dependent Strand Annealing (SDSA) Resolution of D-loop Structures through Holliday Junction Intermediates
Regulation of MECP2 expression and activity Presynaptic phase of homologous DNA pairing and strand exchange O-glycosylation of TSR domain-containing proteins NCAM1 interactions Metalloprotease DUBs Homologous DNA Pairing and Strand Exchange HDR through Single Strand Annealing (SSA) EPHB-mediated forward signaling Defective B3GALTL causes Peters-plus syndrome (PpS) APC-Cdc20 mediated degradation of Nek2A RET signaling HDR through Homologous Recombination (HRR) Transcriptional activation of mitochondrial biogenesis FBXL7 down-regulates AURKA during mitotic entry and in early mitosis NRAGE signals death through JNK TP53 Regulates Transcription of DNA Repair Genes SUMOylation of DNA damage response and repair proteins Recruitment and ATM-mediated phosphorylation of repair and signaling proteins at DNA double strand breaks Nonhomologous End-Joining (NHEJ) Meiotic synapsis G alpha (12/13) signalling events Degradation of the extracellular matrix Cdc20:Phospho–APC/C mediated degradation of Cyclin A AURKA Activation by TPX2 Regulation of PLK1 Activity at G2/M Transition

Regulation of PLK1 Activity at G2/M Transition
Meiotic recombination
G2/M DNA damage checkpoint
Processing of DNA double-strand break ends
Interleukin-4 and Interleukin-13 signaling
PPARA activates gene expression
Regulation of actin dynamics for phagocytic cup formation

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RAF/MAP kinase cascade
Clathrin–mediated endocytosis
Neutrophil degranulation
Neddylation