

Product datasheet for **TA323481**

Chk2 (CHEK2) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 200-1000 WB positive control: MCF-7, 293T, HT-29, HeLa and Jurkat cells
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide corresponding to a region derived from 2-18 amino acids of Human Checkpoint kinase 2
Formulation:	PBS pH7.3, 0.05% NaN ₃ , 50% glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	61 kDa
Gene Name:	checkpoint kinase 2
Database Link:	NP_001005735 Entrez Gene 11200 Human O96017



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Background:

In response to DNA damage and replication blocks; cell cycle progression is halted through the control of critical cell cycle regulators. The protein encoded by this gene is a cell cycle checkpoint regulator and putative tumor suppressor. It contains a forkhead-associated protein interaction domain essential for activation in response to DNA damage and is rapidly phosphorylated in response to replication blocks and DNA damage. When activated; the encoded protein is known to inhibit CDC25C phosphatase; preventing entry into mitosis; and has been shown to stabilize the tumor suppressor protein p53; leading to cell cycle arrest in G1. In addition; this protein interacts with and phosphorylates BRCA1; allowing BRCA1 to restore survival after DNA damage. Mutations in this gene have been linked with Li-Fraumeni syndrome; a highly penetrant familial cancer phenotype usually associated with inherited mutations in TP53. Also; mutations in this gene are thought to confer a predisposition to sarcomas; breast cancer; and brain tumors. This nuclear protein is a member of the CDS1 subfamily of serine/threonine protein kinases. Several transcript variants encoding different isoforms have been found for this gene.

Synonyms:

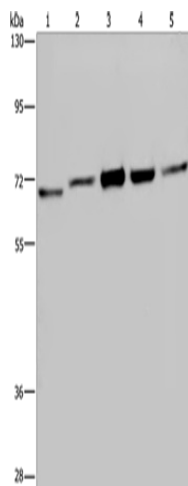
CDS1; CHK2; hCds1; HuCds1; LFS2; PP1425; RAD53

Protein Families:

Druggable Genome, Protein Kinase, Stem cell - Pluripotency

Protein Pathways:

Cell cycle, p53 signaling pathway

Product images:

Gel: 6%SDS-PAGE

Lysate: 40 µg

Lane 1-5: MCF7 cells

293T cells

HT29 cells

Hela cells

Jurkat cells

Primary antibody: TA323481 (CHEK2 Antibody) at dilution 1/150

Secondary antibody: Goat anti rabbit IgG at 1/8000 dilution

Exposure time: 2 minutes