

## Product datasheet for **TA333183**

### Chk2 (CHEK2) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB 1:500 - 1:2000
Reactivity:	Human
Modifications:	Phospho-specific
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	A phospho specific peptide corresponding to residues surrounding S516 of human CHEK2
Formulation:	Store at -20°C (regular) and -80°C (long term). Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	543
Gene Name:	checkpoint kinase 2
Database Link:	<a href="#">NP_009125</a> <a href="#">Entrez Gene 11200 Human</a> <a href="#">O96017</a>



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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:**

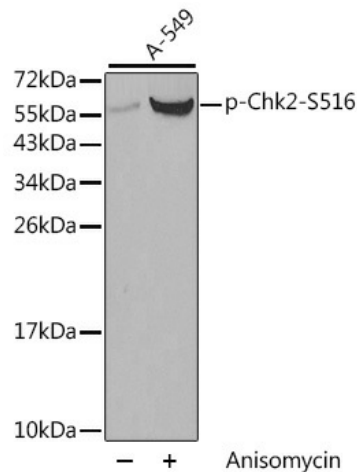
CDS1; CHK2; hCds1; HuCds1; LFS2; PP1425; RAD53

**Protein Families:**

Druggable Genome, Protein Kinase, Stem cell - Pluripotency

**Protein Pathways:**

Cell cycle, p53 signaling pathway

**Product images:**

Western blot analysis of extracts from A549 cells, using Phospho-Chk2-S516 antibody (TA333183). | Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. | Lysates/proteins: 25ug per lane. | Blocking buffer: 3% BSA.