Leader in Biomolecular Solutions for Life Science

www.abclonal.com

Phospho-Chk2-T68 Rabbit mAb

Catalog No.: AP1644 Recombinant

Basic Information

Observed MW
62 kDa

Calculated MW
15-65 kDa

Category
Primary antibody

Applications
WB,IP,ELISA

Cross-Reactivity
Human

CloneNo number
ARC3928

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.

Recommended Dilutions

WB	1:5000 - 1:30000
IP	0.5 μg - 4 μg antibody for 400 μg - 600 μg extracts of whole cells
ELISA	Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions (≥1:10000)，a sequential dilution method is strongly recommended to ensure measurement accuracy.

Immunogen Information

Gene ID
11200

Swiss Prot
O96017

Immunogen
This information is considered to be commercially sensitive.

Synonyms
CDS1; CHK2; LFS2; RAD53; TPDS4; hCds1; HuCds1; PP1425

Product Information

Source
Rabbit

Isotype
IgG

Purification
Affinity purification

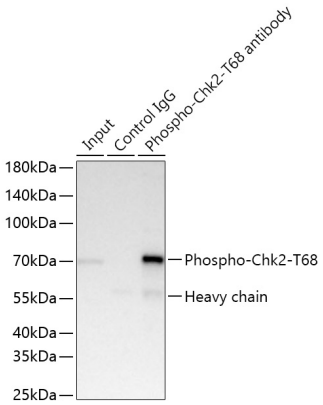
Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.09% Sodium azide,0.05% BSA,50% glycerol,pH7.3.

Contact

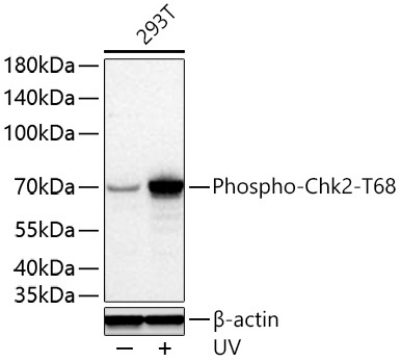
400-999-6126

cn.market@abclonal.com.cn

Validation Data



Immunoprecipitation of Phospho-Chk2-T68 from 600 µg extracts of HeLa cells treated with UV (150 mJ/cm²,1h) was performed using 1 µg of Phospho-Chk2-T68 Rabbit mAb (AP1644). Rabbit Control IgG (AC005) was used to precipitate the Control IgG sample. IP samples were eluted with 1x Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using Phospho-Chk2-T68 Rabbit mAb (AP1644) at a dilution of 1:5000.



Western blot analysis of lysates from 293T cells using Phospho-Chk2-T68 Rabbit mAb (AP1644) at 1:10000 dilution incubated overnight at 4℃. 293T cells were treated with UV (150 mJ/cm²) at 37℃ for 1 hour.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 30 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 5 s.