Leader in Biomolecular Solutions for Life Science

Chk2 Rabbit pAb

Catalog No.: A2145 7 Publications



Basic Information

Observed MW

65kDa

Calculated MW

61kDa

Category

Polyclonal Antibody

Applications

WB, IF/ICC, ELISA

Cross-Reactivity

Human, Mouse, Rat

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 1:100 - 1:500

IF/ICC 1:50 - 1:200

Immunogen Information

Gene ID Swiss Prot 11200 096017

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 1-220 of human Chk2 (NP 009125.1).

Synonyms

CDS1; CHK2; LFS2; RAD53; hCds1; HuCds1; PP1425; Chk2

Contact

www.abclonal.com

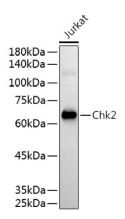
Product Information

SourceIsotypePurificationRabbitIgGAffinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.



Western blot analysis of lysates from Jurkat cells, using Chk2 Rabbit pAb (A2145) at 1:500 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

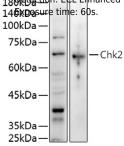
Blocking buffer: 3% nonfat dry milk in TBST.

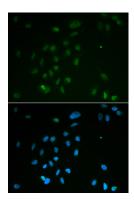
Detection: ECL Basic Kit (RM00020).

Exposure time: 30s.

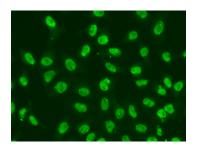
Western blot analysis of various lysates using Chk2 Rabbit pAb (A2145) at 1:500 dilution. Secondary antibody. HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins, 25µg per lane.
Blocking buffer 3% nonfat dry milk in TBST.

18 Detection: ECL Enhanced Kit (RM00021).





Immunofluorescence analysis of MCF-7 cells using Chk2 Rabbit pAb (A2145). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of A549 cells using Chk2 Rabbit pAb (A2145). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution.