

Chk2 Rabbit pAb

Catalog No.: A2145 **7 Publications**

Basic Information

Observed MW

65kDa

Calculated MW

61kDa

Category

Primary antibody

Applications

ELISA, WB, IF/ICC

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	O96017

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

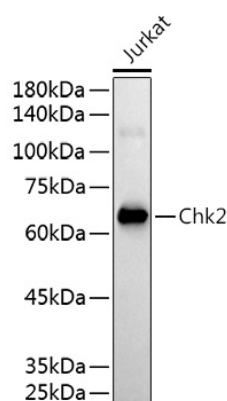
Source	Isotype	Purification
Rabbit	IgG	Affinity purification

Storage

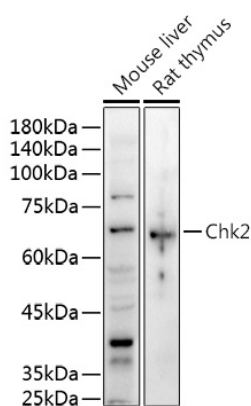
Store at -20°C. Avoid freeze / thaw cycles.

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

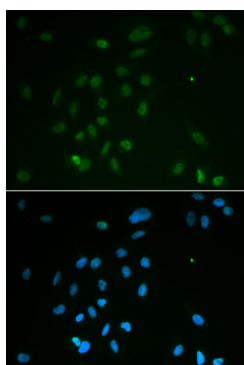
Validation Data



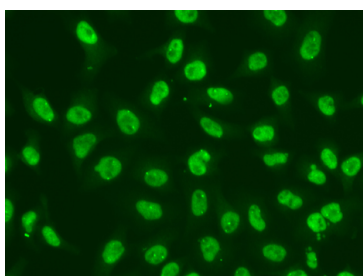
Western blot analysis of extracts of Jurkat cells, using Chk2 antibody (A2145) at 1:500 dilution.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 30s.



Western blot analysis of extracts of various cell lines, using Chk2 antibody (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 Enhanced Kit (RM00021).
Exposure time: 60s.



Immunofluorescence analysis of MCF-7 cells using Chk2 antibody (A2145). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of A549 cells using Chk2 antibody (A2145).