

Datasheet for ABIN7138897
anti-CHEK2 antibody (pThr383)



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2 Images

Overview

Quantity:	100 µL
Target:	CHEK2
Binding Specificity:	pThr383
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CHEK2 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (IF)

Product Details

Immunogen:	Peptide sequence around phosphorylation site of threonine383 (M-R-T(p)-L-C) derived from Human Chk1.
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using

Target Details

Target:	CHEK2
Alternative Name:	CHEK2 (CHEK2 Products)

Target Details

Background:

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 Chk2 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. Three transcript variants encoding different isoforms have been found for this gene.

Shannon L. Gibson, Cancer Res., Dec 2005, 65: 10734 - 10741.

Jinwoo Ahn, J. Biol. Chem., Dec 2002, 277: 48418 - 48426.

Nabil H. Chehab, Genes & Dev., Feb 2000, 14: 278.

Aliases: CDS 1 antibody, Cds1 antibody, Cds1 homolog antibody, Checkpoint kinase 2 antibody, Checkpoint like protein CHK2 antibody, CHEK 2 antibody, Chek2 antibody, Chk 2 antibody, CHK2 checkpoint homolog (S. pombe) antibody, CHK2 checkpoint homolog antibody, CHK2_HUMAN antibody, hCds1 antibody, HuCds 1 antibody, LFS 2 antibody, LFS2 antibody, PP1425 antibody, RAD 53 antibody, RAD53 antibody, Rad53 homolog antibody, Serine/threonine protein kinase Chk2 antibody, Serine/threonine-protein kinase Chk2 antibody

UniProt:

[O96017](#)

Pathways:

[p53 Signaling](#), [Apoptosis](#), [Cell Division Cycle](#)

Application Details

Application Notes:

WB:1:500-1:1000, IF:1:100-1:200,

Restrictions:

For Research Use only

Handling

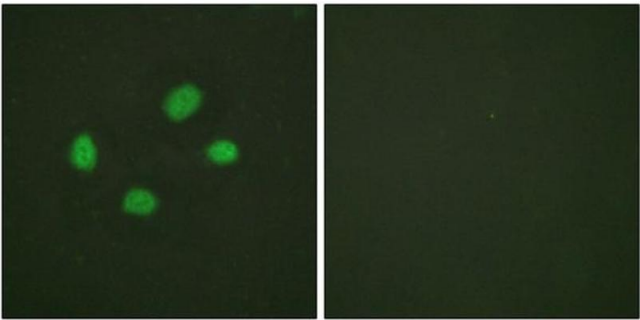
Format:

Liquid

Handling

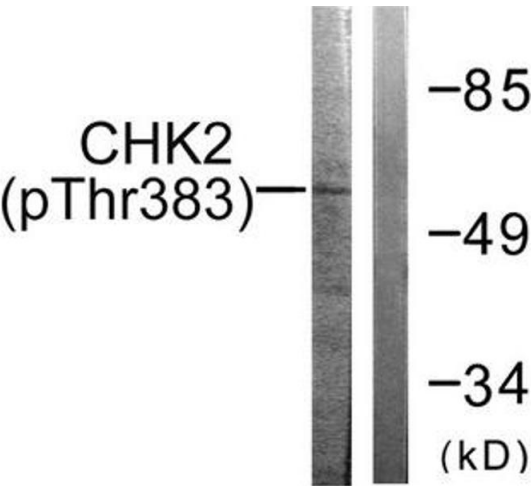
Buffer:	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Immunofluorescence

Image 1. Immunofluorescence staining of methanol-fixed HeLa cells using Chk2 (Phospho-Thr383) Antibody.



Western Blotting

Image 2. Western blot analysis of extracts from COS7 cells treated with UV using Chk2 (Phospho-Thr383) Antibody. The lane on the right is treated with the antigen-specific peptide.