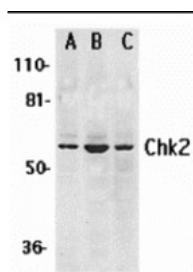


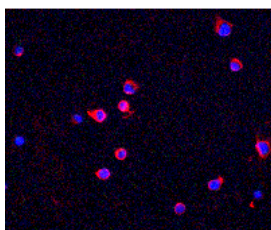


## Chk2 Antibody

CATALOG NUMBER: 2391



Western blot analysis of Chk2 expression in (A) K562, (B) Jurkat, and (C) HL-60 whole cell lysates with Chk2 antibody at 1 ug/ml.



Immunofluorescence of Chk2 in Jurkat cells with Chk2 antibody at 5 ug/mL



Immunocytochemistry of Chk2 in Jurkat cells with Chk2 antibody at 1 ug/mL.

### Specifications

<b>SPECIES REACTIVITY:</b>	Human, Mouse, Rat
<b>TESTED APPLICATIONS:</b>	ELISA, ICC, IF, WB
<b>APPLICATIONS:</b>	Chk2 antibody can be used for detection of Chk2 by Western blot at 1 ug/mL. Antibody can also be used for immunocytochemistry starting at 1 ug/mL. For immunofluorescence start at 5 ug/mL.
<b>USER NOTE:</b>	Optimal dilutions for each application to be determined by the researcher.
<b>POSITIVE CONTROL:</b>	1) Cat. No. 1205 - Jurkat Cell Lysate 2) Cat. No. 1204 - K562 Cell Lysate
<b>PREDICTED MOLECULAR WEIGHT:</b>	Predicted: 60 kDa Observed: 60 kDa
<b>IMMUNOGEN:</b>	Chk2 antibody was raised against a synthetic peptide corresponding to amino acids near the amino terminus of human Chk2.  The immunogen is located within the first 50 amino acids of Chk2.
<b>HOST SPECIES:</b>	Rabbit

### Properties

<b>PURIFICATION:</b>	Chk2 Antibody is affinity chromatography purified via peptide column.
<b>PHYSICAL STATE:</b>	Liquid
<b>BUFFER:</b>	Chk2 Antibody is supplied in PBS containing 0.02% sodium azide.
<b>CONCENTRATION:</b>	1 mg/mL
<b>STORAGE CONDITIONS:</b>	Chk2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
<b>CLONALITY:</b>	Polyclonal
<b>ISOTYPE:</b>	IgG

**CONJUGATE:** Unconjugated

#### Additional Info

**ALTERNATE NAMES:** Chk2 Antibody: CDS1, CHK2, LFS2, RAD53, hCds1, HuCds1, PP1425, CDS1, CHK2 checkpoint homolog, Hucds1

**ACCESSION NO.:** NP\_009125

**PROTEIN GI NO.:** 6005850

**OFFICIAL SYMBOL:** CHEK2

**GENE ID:** 11200

#### Background

**BACKGROUND:** Chk2 Antibody: The p53 tumor-suppressor gene integrates numerous signals that control cell life and death. Several novel molecules involved in p53 signaling, including Chk2, p53R2, p53AIP1, Noxa, PIDD, and PID/MTA2, were recently discovered. The checkpoint kinase Chk2 is the mammalian homologue of yeast Cds1/Rad53. In response to DNA damage, the checkpoint kinase ATM phosphorylates and activates Chk2, which in turn directly phosphorylates and activates p53. Chk2 serves as ATM downstream effector to mediate activation of p53. Chk2 also phosphorylates and activates BRCA1, the product of a tumor suppressor gene that is mutated in breast and ovarian cancer.

**REFERENCES:**

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- 2) Tanaka H, Arakawa H, Yamaguchi T, et al. A ribonucleotide reductase gene involved in a p53-dependent cell-cycle checkpoint for DNA damage. *Nature* 2000; 404:42-9.
- 3) Oda E, Ohki R, Murasawa H, et al. Noxa, a BH3-only member of the Bcl-2 family and candidate mediator of p53-induced apoptosis. *Science* 2000; 288:1053-8.
- 4) Oda K, Arakawa H, Tanaka T, et al. p53AIP1, a potential mediator of p53-dependent apoptosis, and its regulation by Ser-46-phosphorylated p53. *Cell* 2000;102:849-62.

**FOR RESEARCH USE ONLY**

December 12, 2016