



# Chk2 (phospho Thr387) rabbit pAb

Cat No.:ES4611

For research use only

## Overview

|                                 |   |
|---------------------------------|---|
| <b>Product Name</b>             | Chk2 (phospho Thr387) rabbit pAb  |
| <b>Host species</b>             | Rabbit  |
| <b>Applications</b>             | WB;IHC;IF;ELISA   |
| <b>Species Cross-Reactivity</b> | Human;Mouse;Rat   |
| <b>Recommended dilutions</b>    | Western Blot: 1/500 - 1/2000.<br>Immunohistochemistry: 1/100 - 1/300. ELISA:<br>1/5000. Not yet tested in other applications.   |
| <b>Immunogen</b>                | The antiserum was produced against synthesized peptide derived from human Chk2 around the phosphorylation site of Thr387. AA range:361-410  |
| <b>Specificity</b>              | Phospho-Chk2 (T387) Polyclonal Antibody detects endogenous levels of Chk2 protein only when phosphorylated at T387.   |
| <b>Formulation</b>              | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.   |
| <b>Storage</b>                  | Store at -20°C. Avoid repeated freeze-thaw cycles.  |
| <b>Protein Name</b>             | Serine/threonine-protein kinase Chk2  |
| <b>Gene Name</b>                | CHEK2   |
| <b>Cellular localization</b>    | [Isoform 2]: Nucleus. Isoform 10 is present throughout the cell.; [Isoform 4]: Nucleus.; [Isoform 7]: Nucleus.; [Isoform 9]: Nucleus.; [Isoform 12]: Nucleus.; Nucleus, PML body. Nucleus, nucleoplasm. Recruited into PML bodies together with TP53. |
| <b>Purification</b>             | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.   |
| <b>Clonality</b>                | Polyclonal  |
| <b>Concentration</b>            | 1 mg/ml   |
| <b>Observed band</b>            | 60kD  |
| <b>Human Gene ID</b>            | 11200   |
| <b>Human Swiss-Prot Number</b>  | O96017  |
| <b>Alternative Names</b>        | CHEK2; CDS1; CHK2; RAD53;<br>Serine/threonine-protein kinase Chk2; CHK2   |

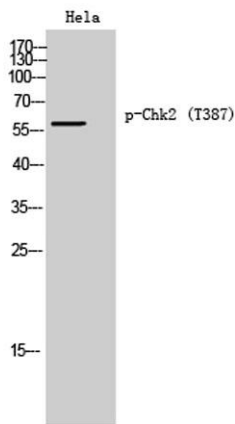




## Background

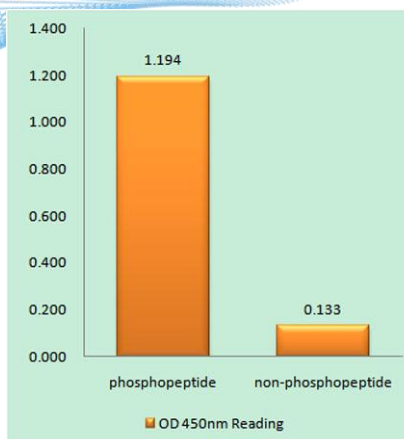
checkpoint homolog; Cds1 homolog; Hucds1; hCds1; Checkpoint kinase 2

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 mutati



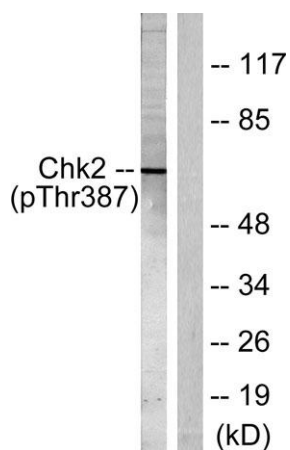
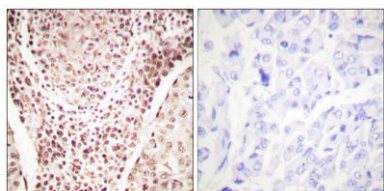
Western Blot analysis of HeLa cells using Phospho-Chk2 (T387) Polyclonal Antibody diluted at 1:500 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).





Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Chk2 (Phospho-Thr387) Antibody

Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using Chk2 (Phospho-Thr387) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from Jurkat cells, using Chk2 (Phospho-Thr387) Antibody. The lane on the right is blocked with the phospho peptide.

