

Chk2 rabbit pAb**Cat#: orb764849 (Manual)**

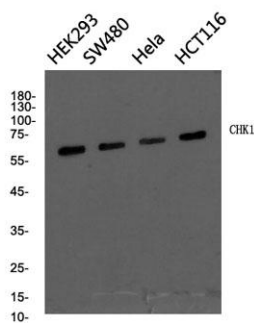
For research use only. Not intended for diagnostic use.

Product Name	Chk2 rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse;Rat
Recommended dilutions	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human CHEK2. AA range:35-84
Specificity	Chk2 Polyclonal Antibody detects endogenous levels of Chk2 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	Serine/threonine-protein kinase Chk2
Gene Name	CHEK2
Cellular localization	[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.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

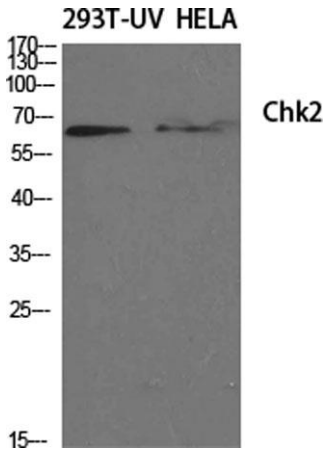
Clonality	Polyclonal
Concentration	1 mg/ml
Observed band	61kD
Human Gene ID	11200
Human Swiss-Prot Number	O96017
Alternative Names	CHEK2; CDS1; CHK2; RAD53; Serine/threonine-protein kinase Chk2; CHK2 checkpoint homolog; Cds1 homolog; Hucds1; hCds1; Checkpoint kinase 2

Background

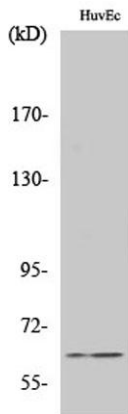
In response to DNA damage and replication blocks, cell cycle progression is halted through the control of critical cell cycle regulators. The protein encoded by this gene is a cell cycle checkpoint regulator and putative tumor suppressor. It contains a forkhead-associated protein interaction domain essential 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 mutati



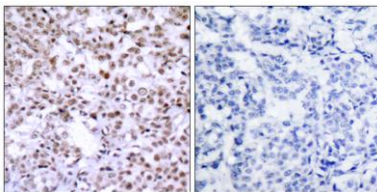
Western blot analysis of Chk2 Polyclonal Antibody, using HeLa, HCT116, SW480, HEK293 cell, 4° over night, secondary antibody (cat: RS0002) was diluted at 1:10000, 37° 1 hour.



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



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



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using Chk2 Antibody. The picture on the right is blocked with the synthesized peptide.