

Chk2 (phospho Thr68) rabbit pAb**Cat#: orb764163 (Manual)**

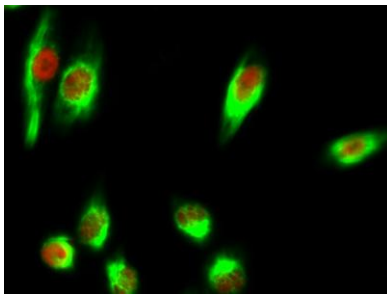
For research use only. Not intended for diagnostic use.

Product Name	Chk2 (phospho Thr68) rabbit pAb
Host species	Rabbit
Applications	IF;WB;IHC;ELISA
Species Cross-Reactivity	Human;Mouse;Rat
Recommended dilutions	IF: 1:50-200 Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human Chk2 around the phosphorylation site of Thr68. AA range:35-84
Specificity	Phospho-Chk2 (T68) Polyclonal Antibody detects endogenous levels of Chk2 protein only when phosphorylated at T68.
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.

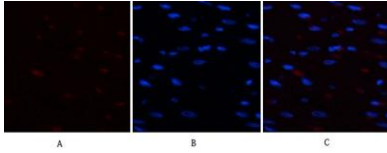
Clonality	Polyclonal
Concentration	1 mg/ml
Observed band	61kD
Human Gene ID	11200
Human Swiss-Prot Number	O96017
Alternative Names	CHEK2; CDS1; CHK2; RAD53; Serine/threonine-protein kinase Chk2; CHK2 checkpoint homolog; Cds1 homolog; Hucds1; hCds1; Checkpoint kinase 2

Background

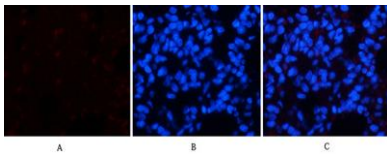
In response to DNA damage and replication blocks, cell cycle progression is halted through the control of critical cell cycle regulators. The protein encoded by this gene is a cell cycle checkpoint regulator and putative tumor suppressor. It contains a forkhead-associated protein interaction domain essential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



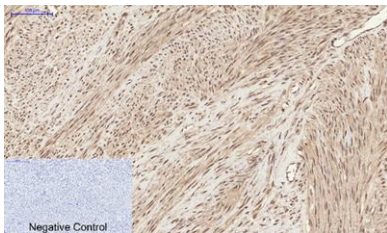
Immunofluorescence analysis of HeLa cell. 1, Chk2 (phospho Thr68) Polyclonal Antibody (red) was diluted at 1:200 (4° overnight). HAO1 Monoclonal Antibody (Mix) (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog: RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog: RS3208 was diluted at 1:1000 (room temperature, 50min).



Immunofluorescence analysis of rat-heart tissue. 1,Chk2 (phospho Thr68) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of rat-lung tissue. 1,Chk2 (phospho Thr68) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1,Chk2 (phospho Thr68) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.