Chk2 (Phospho Thr68) Rabbit pAb

CatalogNo: YP0065 Orthogonal Validated

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- WB,IHC,IF,ELISA

MW
- 61kD (Observed)

Isotype
- IgG

Storage

Storage*	-15°C to -25°C/1 year (Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Recommended Dilution Ratios

IF 1:50-200
WB 1:500-1:2000
IHC 1:100-1:300
ELISA 1:20000
Not yet tested in other applications

Basic Information

Clonality	Polyclonal

Immunogen Information

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.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):VStQE

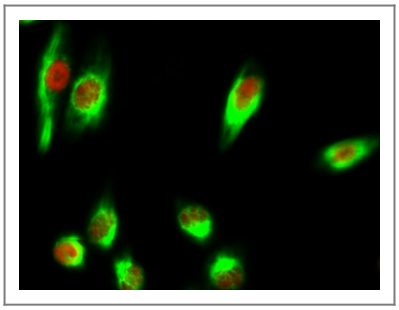
Target Information

Gene name	CHEK2
Protein Name	Serine/threonine-protein kinase Chk2

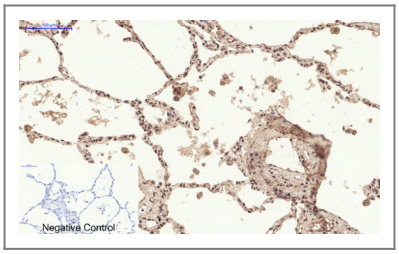
Organism	Gene ID	UniProt ID
Human	11200;	O96017;
Mouse	50883;	Q9Z265;

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.
Tissue specificity	High expression is found in testis , spleen , colon and peripheral blood leukocytes. Low expression is found in other tissues.
Function	Catalytic activity:ATP + a protein = ADP + a phosphoprotein. ,cofactor:Magnesium. ,Disease:Defects in CHEK2 are associated with Li-Fraumeni syndrome 2 (LFS2) [MIM:609265]; a highly penetrant familial cancer phenotype usually associated with inherited mutations in p53/TP53. ,Disease:Defects in CHEK2 are found in some patients with osteosarcoma (OSRC) [MIM:259500]. ,Disease:Defects in CHEK2 are found in some patients with prostate cancer (CaP) [MIM:176807]. ,enzyme regulation:Rapidly phosphorylated on Thr-68 by MLTK in response to DNA damage and to replication block. Kinase activity is also up-regulated by autophosphorylation. ,Function:Regulates cell cycle checkpoints and apoptosis in response to DNA damage , particularly to DNA double-strand breaks. Inhibits CDC25C phosphatase by phosphorylation on 'Ser-216' , preventing the entry into mitosis. May also play a role in meiosis. Regulates the TP53 tumor suppressor through phosphorylation at 'Thr-18' and 'Ser-20'. ,similarity:Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. CHK2 subfamily. ,similarity:Contains 1 FHA domain. ,similarity:Contains 1 protein kinase domain. ,subcellular location:Isoform 10 is present throughout the cell. ,tissue specificity:High expression is found in testis , spleen , colon and peripheral blood leukocytes. Low expression is found in other tissues. ,

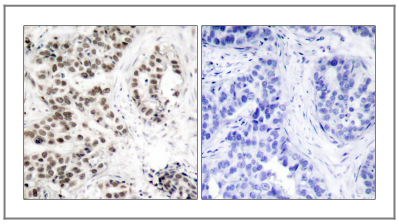
Validation Data



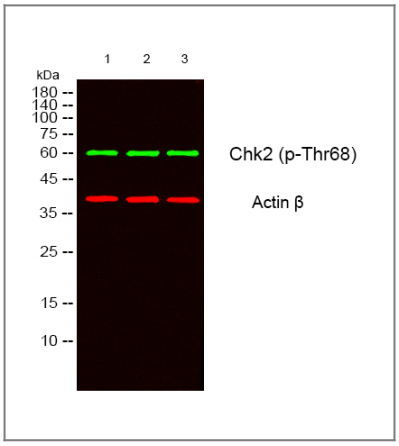
Immunofluorescence analysis of Hela cell. 1,mouse Tubulin Antibody YM3035 (green) was diluted at 1:200 (4℃ overnight). Chk2 (Phospho Thr68) Rabbit pAb (red) was diluted at 1:200 (4℃ overnight). 2, Goat Anti Rabbit AbFluor 594 Catalog:RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse AbFluor 488 Catalog:RS3208 was diluted at 1:1000 (room temperature, 50min).



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



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma, using Chk2 (Phospho-Thr68) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from 1) 293T, 2) HELA cells, (Green) primary antibody was diluted at 1:1000, 4℃ over night, secondary antibody (cat:RS23920)was diluted at 1:10000, 37° 1hour. (Red) Actin β Monoclonal Antibody (5B7) (cat:YM3028) antibody was diluted at 1:5000 as loading control, 4℃ over night,secondary antibody (cat:RS23710)was diluted at 1:10000, 37° 1hour.

Contact information

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