

Chk2 (Phospho Ser516) Rabbit pAb

CatalogNo: YP0064

Orthogonal Validated 

Key Features

Host Species

- Rabbit

Reactivity

- Human, Monkey

Applications

- WB, ELISA

MW

- 61kD (Observed)

Isotype

- IgG

Recommended Dilution Ratios

WB 1:500-1:2000**ELISA 1:10000****Not yet tested in other applications.**

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.

Basic Information

Clonality

Polyclonal

Immunogen Information

Immunogen

The antiserum was produced against synthesized peptide derived from human Chk2 around the phosphorylation site of Ser516. AA range: 486-535

Specificity

Phospho-Chk2 (S516) Polyclonal Antibody detects endogenous levels of Chk2 protein only when phosphorylated at S516. 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 When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports.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): QPSTS

| Target Information

Gene name CHEK2

Protein Name Serine/threonine-protein kinase Chk2

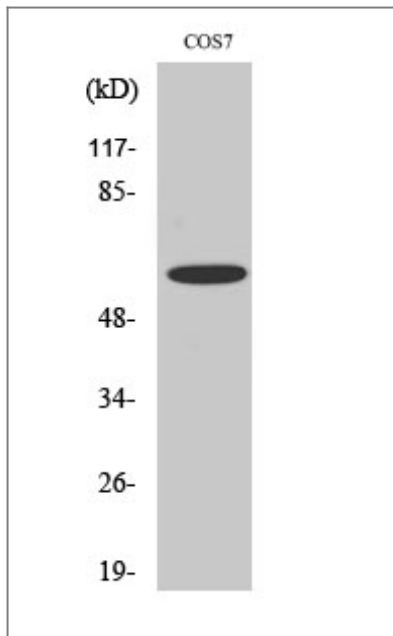
Organism	Gene ID	UniProt ID
Human	11200 ;	O96017 ;
Mouse	50883 ;	Q9Z265 ;

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.

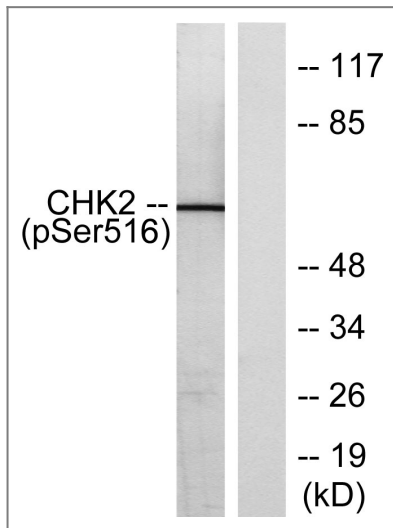
Tissue specificity High expression is found in testis, spleen, colon and peripheral blood leukocytes. Low expression is found in other tissues.

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



Western Blot analysis of various cells using Phospho-Chk2 (S516) Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA).



Western blot analysis of lysates from HeLa cells treated with UV, using Chk2 (Phospho-Ser516) Antibody. The lane on the right is blocked with the phospho peptide.

Contact information

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