Chk2 (Phospho Thr68) (PT0729R) PT® Rabbit mAb

CatalogNo: YM8538 Recombinant

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- WB,IHC,IF,IP,ELISA

MW
- 61kD (Calculated)

61kD (Observed)

Isotype
- IgG,Kappa

Recommended Dilution Ratios

IHC 1:200-1:1000
WB 1:2000-1:10000
IF 1:200-1:1000
ELISA 1:5000-1:20000
IP 1:50-1:200

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

Basic Information

Clonality	Monoclonal
Clone Number	PT0729R

Immunogen Information

Specificity	Chk2 (Phospho Thr68) 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 When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports.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

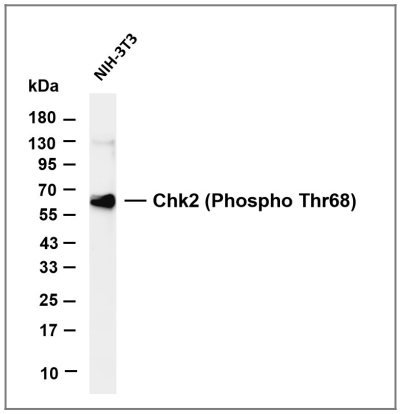
Organism	Gene ID	UniProt ID
Human	11200;	O96017;
Mouse	50883;	Q9Z265;

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.

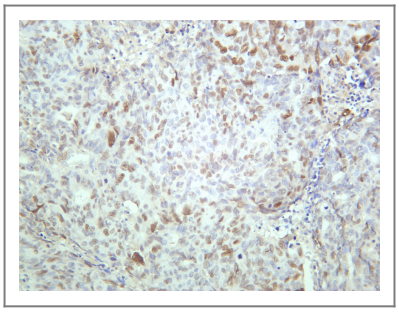
Tissue specificity High expression is found in testis, spleen, colon and peripheral blood leukocytes. Low expression is found in other tissues.

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



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Chk2 (Phospho Thr68) antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: NIH-3T3 was treated with UV for 2 hours Predicted band size: 61kDa Observed band size: 61kDa



Human ovarian clear cell carcinoma was stained with anti-Chk2 (Phospho Thr68) rabbit antibody

Contact information

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Please scan the QR code to access additional product information:
Chk2 (Phospho Thr68) (PT0729R) PT® Rabbit mAb