

Product datasheet

Anti-Chk2 (phospho S33 + S35) antibody [EPR916(2)Y] ab68267

Recombinant RabMAb

1 References 1 Image

Overview

Product name	Anti-Chk2 (phospho S33 + S35) antibody [EPR916(2)Y]
Description	Rabbit monoclonal [EPR916(2)Y] to Chk2 (phospho S33 + S35)
Host species	Rabbit
Specificity	This antibody detects Chk2 phosphorylated on Serine 33/35.
Tested applications	Suitable for: WB, ICC Unsuitable for: Flow Cyt, IHC-P or IP
Species reactivity	Reacts with: Human
Immunogen	A synthetic phospho-peptide corresponding to residues surrounding Serine 33/35 of human Chk2.
Positive control	HeLa cell lysate.
General notes	Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information. Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab[®] patents This product is a recombinant rabbit monoclonal antibody.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.40 Preservative: 0.05% Sodium azide Constituents: 40% Glycerol, 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR916(2)Y

Isotype

IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab68267** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		
ICC		

Application notes

ICC: 1/100 - 1/250.

WB: 1/500. Detects a band of approximately 61 kDa (predicted molecular weight: 61 kDa).

Is unsuitable for Flow Cyt, IHC-P or IP.

Not yet tested in other applications.

Optimal dilutions/concentrations should be determined by the end user.

Target

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'.

Tissue specificity

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

Involvement in 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. Defects in CHEK2 may be a cause of susceptibility to prostate cancer (PC) [MIM:176807]. It is a malignancy originating in tissues of the prostate. Most prostate cancers are adenocarcinomas that develop in the acini of the prostatic ducts. Other rare histopathologic types of prostate cancer that occur in approximately 5% of patients include small cell carcinoma, mucinous carcinoma, prostatic ductal carcinoma, transitional cell carcinoma, squamous cell carcinoma, basal cell carcinoma, adenoid cystic carcinoma (basaloid), signet-ring cell carcinoma and neuroendocrine carcinoma.

Defects in CHEK2 are found in some patients with osteogenic sarcoma (OSRC) [MIM:259500].

Sequence similarities

Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. CHK2 subfamily. Contains 1 FHA domain. Contains 1 protein kinase domain.

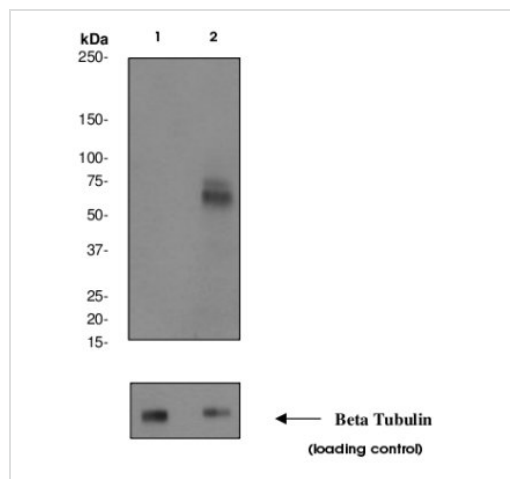
Post-translational modifications

Phosphorylated by PLK4.

Cellular localization

Nucleus; Nucleus. Isoform 10 is present throughout the cell and Nucleus > PML body. Nucleus > nucleoplasm. Recruited into PML bodies together with TP53.

Images



Western blot - Anti-Chk2 (phospho S33 + S35) antibody [EPR916(2)Y] (ab68267)

All lanes : Anti-Chk2 (phospho S33 + S35) antibody [EPR916(2)Y] (ab68267) at 1/500 dilution

Lane 1 : HeLa cell lysate, untreated.

Lane 2 : HeLa cell lysate, treated with irradiation.

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP conjugated Goat anti-rabbit at 1/2000 dilution

Predicted band size: 61 kDa

Observed band size: 61 kDa

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