

Product datasheet

Anti-Chk2 antibody ab47433

★★★★★ [2 Abreviews](#) [24 References](#) [2 Images](#)

Overview

Product name	Anti-Chk2 antibody
Description	Rabbit polyclonal to Chk2
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB
Species reactivity	Reacts with: Human
Immunogen	Synthetic non-phosphopeptide derived from Human Chk2 around the phosphorylation site of threonine 68.

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

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: 0.02% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride
Purity	Immunogen affinity purified
Purification notes	Affinity purified from rabbit antiserum by affinity chromatography using epitope-specific immunogen.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab47433 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
IHC-P	★★★★★ (1)	Use at an assay dependent concentration.
WB		1/500 - 1/1000. Detects a band of approximately 61 kDa (predicted molecular weight: 61 kDa).

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.

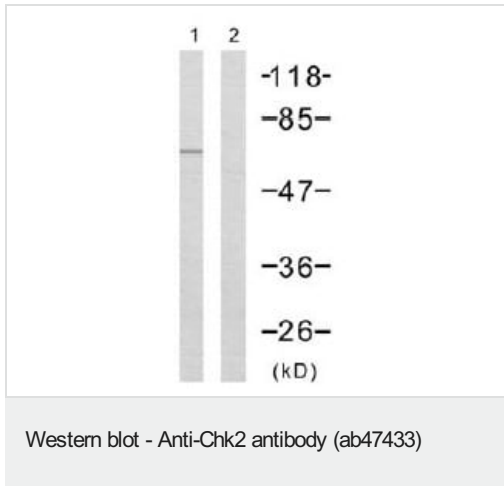
Post-translational modifications

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



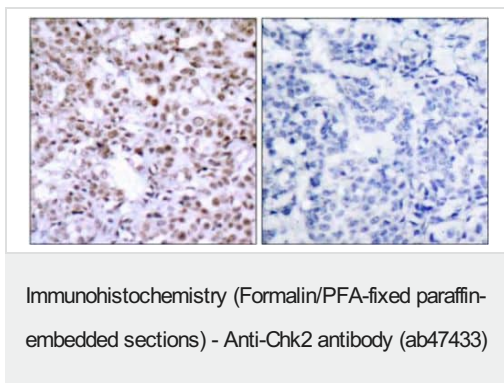
All lanes : Anti-Chk2 antibody (ab47433) at 1 µg

Lane 1 : extracts from Jurkat cells

Lane 2 : extracts from Jurkat cells incubated with immunizing peptide

Predicted band size: 61 kDa

Observed band size: 61 kDa



ab47433 at 1/100 dilution staining Chk2 in human breast carcinoma tissue section by Immunohistochemistry (Formalin/ PFA fixed paraffin embedded tissue sections). Right image show staining with ab47433 after incubation with specific peptide and left image show staining with untreated antibody.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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