

Product datasheet

Anti-Chk2 (phospho T68) antibody [Y171] - BSA and Azide free ab239808

Recombinant RabMAb

[4 Images](#)

Overview

Product name	Anti-Chk2 (phospho T68) antibody [Y171] - BSA and Azide free
Description	Rabbit monoclonal [Y171] to Chk2 (phospho T68) - BSA and Azide free
Host species	Rabbit
Specificity	<i>Stimulation may be required to allow detection of the phosphorylated protein. Please see images below for recommended treatment conditions and positive controls.</i>
Tested applications	Suitable for: IP, Dot blot, WB Unsuitable for: Flow Cyt, ICC or IHC
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Cell lysates from HEK-293 cells treated with UV and/or phosphatase.
General notes	<p>ab239808 is the carrier-free version of ab32148.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p>

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb[®] patents](#).

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	Y171
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab239808 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
IP		Use at an assay dependent concentration.
Dot blot		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 62 kDa (predicted molecular weight: 61 kDa).

Application notes Is unsuitable for Flow Cyt, ICC or IHC.

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.

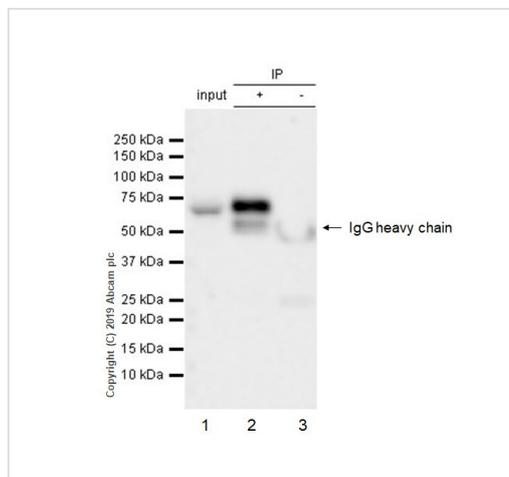
Post-translational modifications

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



Immunoprecipitation - Anti-Chk2 (phospho T68) antibody [Y171] - BSA and Azide free (ab239808)

ab32148 (purified) at 1:30 dilution (2µg) immunoprecipitating Chk2 in HEK-293 treated with UV whole cell lysate.

Lane 1 (input): HEK-293 (Human embryonic kidney epithelial cell) treated with UV whole cell lysate 10µg

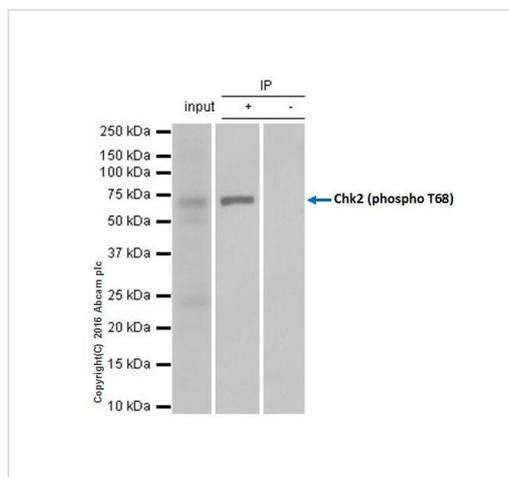
Lane 2 (+): **ab32148** & HEK-293 treated with UV whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of **ab32148** in HEK-293 treated with UV whole cell lysate

For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/1000 dilution.

Blocking and diluting buffer: 5% NFDm/TBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32148**).



Immunoprecipitation - Anti-Chk2 (phospho T68) antibody [Y171] - BSA and Azide free (ab239808)

ab32148 at 1/20 dilution immunoprecipitating Chk2 (phospho T68) in HEK-293 (human embryonic kidney) whole cell lysate observed at 70kDa (lanes 1 and 2).

Lane 1 (input): HEK-293 cells treated with UV at 60J/m2 for 2 hours. Whole cell lysate 10µg

Lane 2 (+): **ab32148** + HEK-293 treated with UV at 60J/m2 for 2 hours. Whole cell lysate

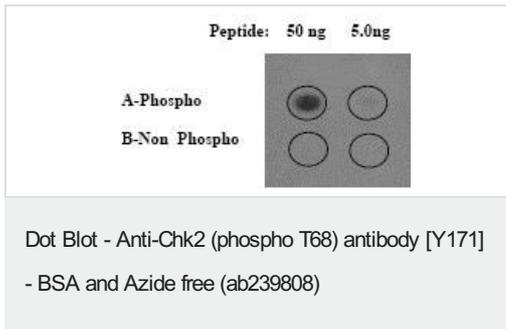
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of **ab32148** in HEK- treated with UV at 60J/m2 for 2 hours. Whole cell lysate

For western blotting, **ab32148** at 1/500 dilution was used followed by VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/1000 dilution.

Blocking and Diluting buffer and concentration: 5% NFDM/TBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab32148](#)).

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Dot Blot analysis on immunogen phospho-peptide (A) and non-phospho peptide (B) using anti-Phospho-Chkr2 (pT68) RabMAb ([ab32148](#)) dilution 1:500

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab32148](#)).

This image was generated using the unpurified version of the product.

Why choose a recombinant antibody?

- Research with confidence**
Consistent and reproducible results
- Long-term and scalable supply**
Recombinant technology
- Success from the first experiment**
Confirmed specificity
- Ethical standards compliant**
Animal-free production

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

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