

Product datasheet

Anti-p38 antibody [E229] - BSA and Azide free ab225534

KO **VALIDATED** Recombinant **RabMAb**

[6 References](#) [5 Images](#)

Overview

Product name	Anti-p38 antibody [E229] - BSA and Azide free
Description	Rabbit monoclonal [E229] to p38 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: WB, IP, Flow Cyt, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide (the amino acid sequence is considered to be commercially sensitive) corresponding to Human p38 aa 150-250 (internal sequence). Database link: Q16539
Positive control	WB: Jurkat, C6, NIH/3T3 or HeLa whole cell lysate (ab150035). ICC/IF: NIH/3T3 cell lysate.
General notes	Ab225534 is the carrier-free version of ab170099 . This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes.

Our [carrier-free formats](#) are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency.

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.

ab225534 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm.

Maxpar® is a trademark of Fluidigm Canada Inc.

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

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as customer reviews and Q&As.

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	E229
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab225534** 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		Use at an assay dependent concentration. Predicted molecular weight: 42 kDa.
IP		Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. ab199376 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF		Use at an assay dependent concentration.

Target

Function	Responds to activation by environmental stress, pro-inflammatory cytokines and lipopolysaccharide (LPS) by phosphorylating a number of transcription factors, such as ELK1 and
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ATF2 and several downstream kinases, such as MAPKAPK2 and MAPKAPK5. Plays a critical role in the production of some cytokines, for example IL-6. May play a role in stabilization of EPO mRNA during hypoxic stress. Isoform Mxi2 activation is stimulated by mitogens and oxidative stress and only poorly phosphorylates ELK1 and ATF2. Isoform Exip may play a role in the early onset of apoptosis.

Tissue specificity

Brain, heart, placenta, pancreas and skeletal muscle. Expressed to a lesser extent in lung, liver and kidney.

Sequence similarities

Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily.

Contains 1 protein kinase domain.

Domain

The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases.

Post-translational modifications

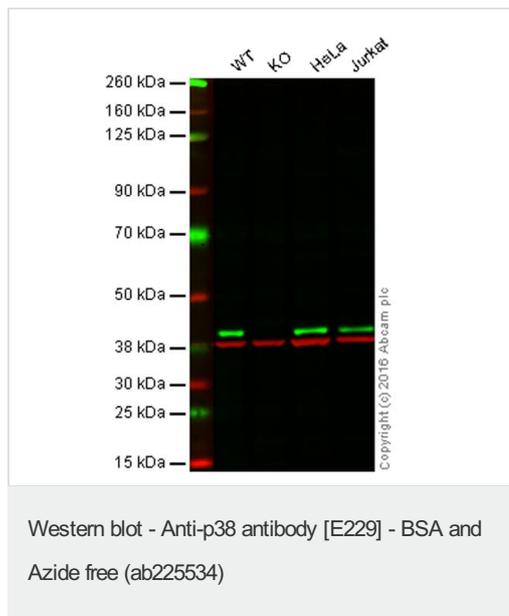
Dually phosphorylated on Thr-180 and Tyr-182, which activates the enzyme.

Phosphorylated upon DNA damage, probably by ATM or ATR.

Cellular localization

Cytoplasm. Nucleus.

Images



This WB data was generated using the same anti-p38 antibody clone [E229] in a different buffer formulation (cat# [ab170099](#)).

Lane 1: Wild-type HAP1 cell lysate (20 µg)

Lane 2: p38 knockout HAP1 cell lysate (20 µg)

Lane 3: HeLa cell lysate (20 µg)

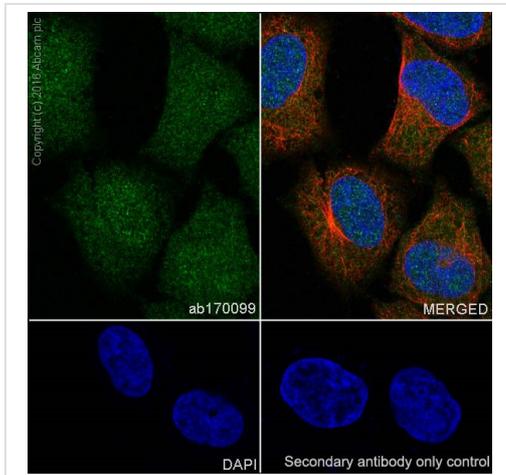
Lane 4: Jurkat cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - [ab170099](#)

observed at 40 kDa. Red - loading control, [ab8245](#), observed at 37 kDa.

[ab170099](#) was shown to specifically react with p38 when p38 knockout samples were used. Wild-type and p38 knockout samples were subjected to SDS-PAGE. [ab170099](#) and

[ab8245](#) (loading control to GAPDH) were diluted 1/1000 and 1/2000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1/10 000 dilution for 1 h at room temperature before imaging.

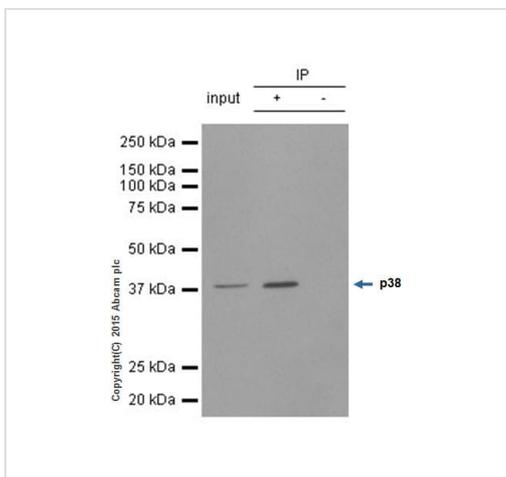


Immunocytochemistry/ Immunofluorescence - Anti-p38 antibody [E229] - BSA and Azide free (ab225534)

Immunocytochemistry/ Immunofluorescence analysis of HeLa(Human epithelial cell line from cervix adenocarcinoma) cells labeling p38 with [ab170099](#) at 1/250. Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% tritonX-100. [ab150077](#), an Alexa Fluor® 488 Goat anti-Rabbit IgG (1/1000) was used as the secondary antibody. The cells were co-stained with [ab195889](#), an anti-alpha tubulin antibody [DM1A] microtubule marker (Alexa Fluor® 594) at 1/200. Nuclei counterstained with DAPI (blue).

Confocal image shows nuclear and cytoplasmic staining on HeLa cell line.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab170099](#)).



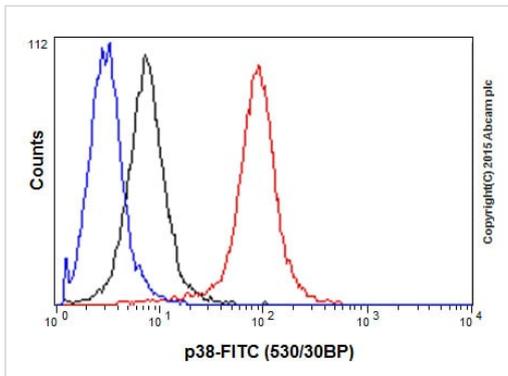
Immunoprecipitation - Anti-p38 antibody [E229] - BSA and Azide free (ab225534)

[ab170099](#) (purified) at 1/20 immunoprecipitating p38 in Jurkat whole cell lysate. 10 ug of cell lysate was present in the input. For western blotting, a HRP-conjugated Veriblot for IP Detection Reagent ([ab131366](#)) was used for detection at 1/1,500 dilution. A rabbit monoclonal IgG ([ab172730](#)) was used instead of [ab128913](#) as a negative control (Lane 3).

Blocking buffer and concentration: 5% NFDm/TBST.

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 ([ab170099](#)).



Flow Cytometry - Anti-p38 antibody [E229] - BSA and Azide free (ab225534)

Flow Cytometry analysis of HeLa cells labelling p38 with purified [ab170099](#) at 1/40 (red). Cells were fixed with 4% paraformaldehyde. A FITC-conjugated goat anti-rabbit IgG (1/500) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal IgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab170099](#)).

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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