abcam

Product datasheet

Anti-p38 antibody ab223619

3 Images

Overview

Product name	Anti-p38 antibody
Description	Rabbit polyclonal to p38
Host species	Rabbit
Tested applications	**Suitable for:** WB, ICC/IF
Species reactivity	**Reacts with:** Rat, Human
Immunogen	Synthetic peptide corresponding to Human p38 conjugated to keyhole limpet haemocyanin (Cysteine residue). 20 amino acids Database link: Q16539
Positive control	WB: A431, A549, HCT 116, HeLa, HEK-293, HepG2, HL-60, HUVEC, Jurkat, MCF7, PC-3, and T98G cell lysates; Rat brain lysate. ICC/IF: HeLa cells.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.4 Preservative: 0.09% Sodium azide Constituents: 50% Glycerol, PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab223619** in the following tested applications.

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

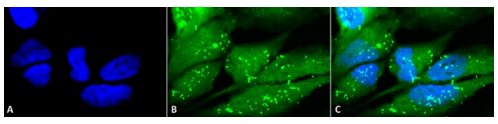
Application	Abreviews	Notes
WB		1/1000. Detects a band of approximately 43 kDa (predicted molecular weight: 41 kDa).

Application	Abreviews	Notes
ICC/IF		1/100.

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 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.

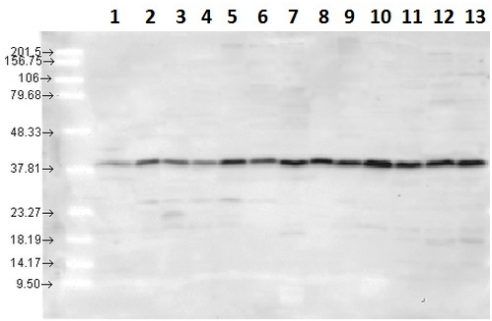
Images



Immunocytochemistry/ Immunofluorescence - Anti-p38 antibody (ab223619)

2% formaldehyde-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) cells stained for p38 (green) using ab223619 at 1/100 dilution in ICC/IF. Secondary: Goat Anti-Rabbit FITC at 1/200 dilution for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1/40000 for 2 hours RT.

(A) DAPI nuclear stain (B) ab223619 (C) Merge.



Western blot - Anti-p38 antibody (ab223619)

All lanes : Anti-p38 antibody (ab223619) at 1/4000 dilution

Lane 1 : A431 (human epidermoid carcinoma cell line) cell lysate
Lane 2 : A549 (human lung carcinoma cell line) cell lysate
Lane 3 : HCT 116 (human colorectal carcinoma cell line) cell lysate
Lane 4 : HeLa (human epithelial cell line from cervix adenocarcinoma) cell lysate
Lane 5 : HEK-293 (human epithelial cell line from embryonic kidney) cell lysate
Lane 6 : HepG2 (human liver hepatocellular carcinoma cell line) cell lysate
Lane 7 : HL-60 (human promyelocytic leukemia cell line) cell lysate
Lane 8 : HUVEC (human umbilical vein endothelial cell line) cell lysate
Lane 9 : Jurkat (human T cell leukemia cell line from peripheral blood) cell lysate
Lane 10 : MCF7 (human breast adenocarcinoma cell line) cell lysate
Lane 11 : PC-3 (human prostate adenocarcinoma cell line) cell lysate
Lane 12 : T98G cell lysate
Lane 13 : Rat brain lysate

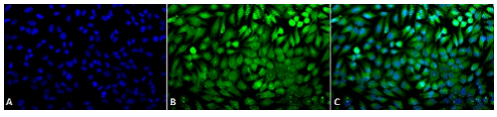
Lysates/proteins at 15 µg per lane.

Secondary
All lanes : Donkey Anti-Rabbit IgG HRP

Predicted band size: 41 kDa
Observed band size: 43 kDa
why is the actual band size different from the predicted?

Blocking buffer: 1.5% BSA.

Primary antibody was incubated for 2 hours, the secondary for 1 hour at RT.



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

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