

Product datasheet

Anti-JNK2 antibody [EP1595Y] ab76125


KO VALIDATED

Recombinant

RabMAb

★★★★★ [1 Abreviews](#) [39 References](#) [8 Images](#)

Overview

Product name	Anti-JNK2 antibody [EP1595Y]
Description	Rabbit monoclonal [EP1595Y] to JNK2
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IP, IHC-P, ELISA
Species reactivity	Reacts with: Human, Recombinant fragment Predicted to work with: Mouse, Rat 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HEK293T, MCF7, HAP1 and HeLa cell lysates. IHC-P: Human breast carcinoma tissue. IP: HeLa cell lysate. Flow Cyt (intra): HeLa cells.
General notes	<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> <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.</p>

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. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP1595Y

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab76125 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
Flow Cyt (Intra)		1/40. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (1)	1/1000 - 1/10000. Predicted molecular weight: 48 kDa.
IP		Use a concentration of 5 µg/ml.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
ELISA		Use at an assay dependent concentration.

Target

Function

Responds to activation by environmental stress and pro-inflammatory cytokines by phosphorylating a number of transcription factors, primarily components of AP-1 such as c-Jun and ATF2 and thus regulates AP-1 transcriptional activity. In T-cells, JNK1 and JNK2 are required for polarized differentiation of T-helper cells into Th1 cells.

JNK2 isoforms display different binding patterns: alpha-1 and alpha-2 preferentially bind to c-Jun, whereas beta-1 and beta-2 bind to ATF2. However, there is no correlation between binding and phosphorylation, which is achieved at about the same efficiency by all isoforms. JUNB is not a substrate for JNK2 alpha-2, and JUND binds only weakly to it.

Sequence similarities

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

Contains 1 protein kinase domain.

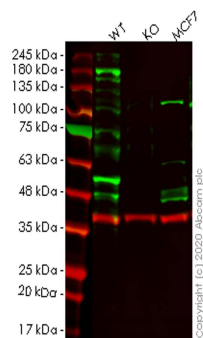
Domain

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

Post-translational modifications

Dually phosphorylated on Thr-183 and Tyr-185, which activates the enzyme. Autophosphorylated in vitro.

Images



Western blot - Anti-JNK2 antibody [EP1595Y]
(ab76125)

All lanes : Anti-JNK2 antibody [EP1595Y] (ab76125) at 1/1000 dilution

Lane 1 : Wild-type HEK293T cell lysate

Lane 2 : MAPK9 knockout HEK293T cell lysate

Lane 3 : MCF7 cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

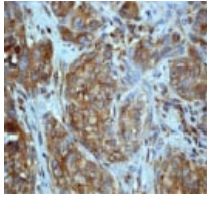
All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

Predicted band size: 48 kDa

Observed band size: 48 kDa

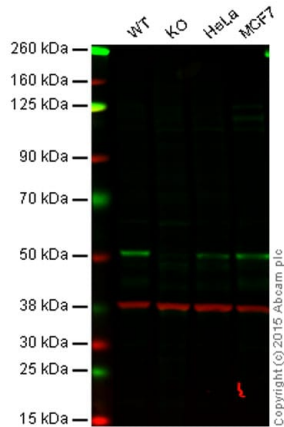
Lanes 1-3: Merged signal (red and green). Green - ab76125 observed at 48 kDa. Red - loading control [ab8245](#) observed at 36 kDa.

ab76125 Anti-JNK2 antibody [EP1595Y] was shown to specifically react with JNK2 in wild-type HEK293T cells. Loss of signal was observed when knockout cell line [ab266355](#) (knockout cell lysate [ab257527](#)) was used. Wild-type and JNK2 knockout samples were subjected to SDS-PAGE. ab76125 and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. 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 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-JNK2 antibody [EP1595Y] (ab76125)

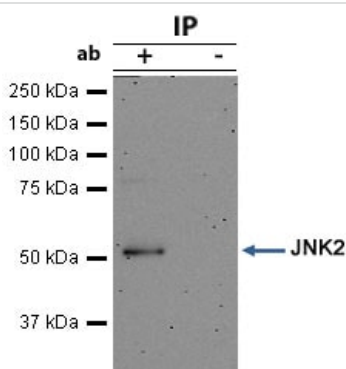
ab76125 at 1/100 dilution staining JNK2 in human breast carcinoma by Immunohistochemistry, Paraffin-embedded tissue. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Western blot - Anti-JNK2 antibody [EP1595Y] (ab76125)

Lane 1: Wild-type HAP1 cell lysate (20 µg)
Lane 2: JNK2 knockout HAP1 cell lysate (20 µg)
Lane 3: HeLa cell lysate (20 µg)
Lane 4: MCF7 cell lysate (20 µg)
Lanes 1 - 4: Merged signal (red and green). Green - ab76125 observed at 54 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab76125 was shown to specifically react with JNK2 when JNK2 knockout samples were used. Wild-type and JNK2 knockout samples were subjected to SDS-PAGE. ab76125 and **ab8245** (loading control to GAPDH) were diluted 1/2500 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 1/10000 dilution for 1 h at room temperature before imaging.



Immunoprecipitation - Anti-JNK2 antibody [EP1595Y] (ab76125)

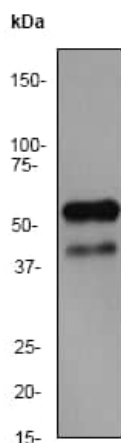
JNK2 was immunoprecipitated using 0.5mg HeLa whole cell extract, 5µg of Rabbit monoclonal to JNK2 and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).

The antibody was incubated under agitation with Protein G beads for 10min, HeLa whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab76125.

Secondary: Mouse monoclonal [SB62a] Secondary Antibody to Rabbit IgG light chain (HRP) (**ab99697**).

Band: 48kDa; JNK2



Western blot - Anti-JNK2 antibody [EP1595Y]
(ab76125)

Anti-JNK2 antibody [EP1595Y] (ab76125) at 1/50000 dilution +
HeLa cell lysate at 10 µg

Secondary

goat anti-rabbit-HRP at 1/1000 dilution

Developed using the ECL technique.

Predicted band size: 48 kDa

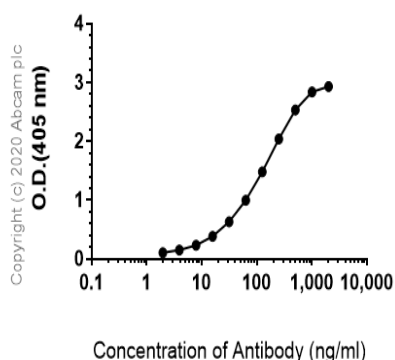
Observed band size: 54 kDa

Additional bands at: 46 kDa (possible isoform)

Flow Cytometry (Intracellular) - Anti-JNK2 antibody
[EP1595Y] (ab76125)

Overlay histogram showing HeLa cells stained with ab76125 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab76125, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) ([ab96899](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed.

Indirect ELISA antibody dose-response curve
antigen at 250 ng/ml



ELISA - Anti-JNK2 antibody [EP1595Y] (ab76125)

ELISA analysis of Human JNK2 recombinant protein at 250 ng/mL with ab76125. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) at 1/2500 dilution was used as the secondary antibody.

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

Anti-JNK2 antibody [EP1595Y] (ab76125)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors