

Product datasheet

Anti-JNK1 (phospho T183 + Y185) antibody [EPR20763] ab215208

Recombinant RabMAb

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

Overview

Product name	Anti-JNK1 (phospho T183 + Y185) antibody [EPR20763]
Description	Rabbit monoclonal [EPR20763] to JNK1 (phospho T183 + Y185)
Host species	Rabbit
Specificity	Based on sequence homology this antibody cross reacts with JNK2 (phospho T183/Y185) and JNK3 (phospho T221/Y223).
Tested applications	Suitable for: Dot blot, IP, WB
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human JNK1 aa 150-250. The exact sequence is proprietary. Database link: P45983
Positive control	WB: HEK-293 treated with 40 J/m ² UV-C light, then cultivated in RPMI 1640 media containing 10% FBS for 30 minutes and U-2 OS treated with 50 J/m ² UV-C light, then cultivated in RPMI 1640 media containing 10% FBS for 2 hours cell lysate. Dot Blot: JNK1 (phospho T183/Y185) peptide. IP: HEK-293 treated with 40 J/m ² UV-C light, then cultivated in RPMI 1640 media containing 10% FBS for 30 minutes cell lysate.
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> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>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™</p>

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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20763
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab215208** 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
Dot blot		1/1000.
IP		1/30.
WB		1/1000. Detects a band of approximately 48 kDa (predicted molecular weight: 48 kDa).

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 JUN, JDP2 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 (By similarity). Phosphorylates heat shock factor protein 4 (HSF4).
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JNK1 isoforms display different binding patterns: beta-1 preferentially binds to c-Jun, whereas alpha-1, alpha-2, and beta-2 have a similar low level of binding to both c-Jun or ATF2. However, there is no correlation between binding and phosphorylation, which is achieved at about the same efficiency by all isoforms.

Sequence similarities

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

Contains 1 protein kinase domain.

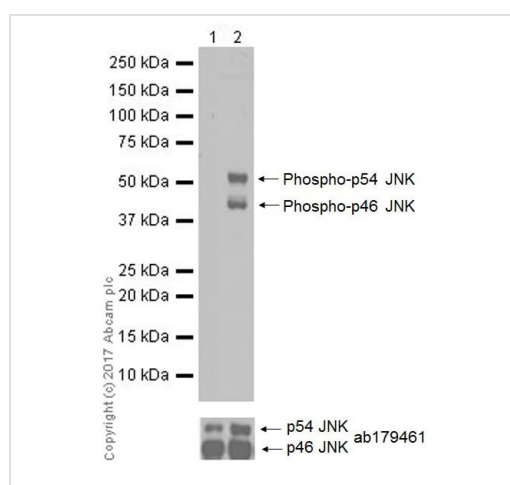
Domain

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.

Images



Western blot - Anti-JNK1 (phospho T183 + Y185) antibody [EPR20763] (ab215208)

All lanes : Anti-JNK1 (phospho T183 + Y185) antibody [EPR20763] (ab215208) at 1/1000 dilution

Lane 1 : Untreated HEK-293 (human epithelial cell line from embryonic kidney) cultivated in RPMI 1640 media containing 10% FBS for 30 minutes, whole cell lysate

Lane 2 : HEK-293 treated with 40 J/m² UV-C light, then cultivated in RPMI 1640 media containing 10% FBS for 30 minutes, whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 48 kDa

Observed band size: 46, 54 kDa

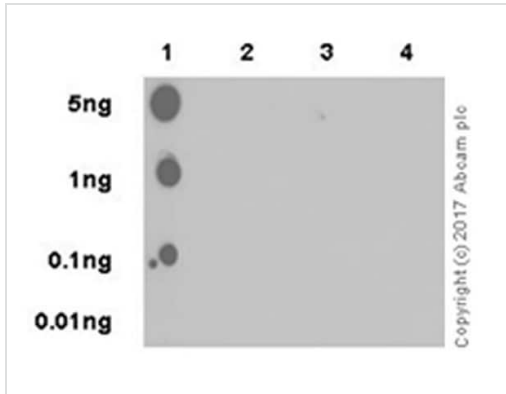
[why is the actual band size different from the predicted?](#)

Exposure time: 1 minute

Blocking/Dilution: 5% NFDm/TBST.

Phosphorylation of JNK at T183/Y185 can be induced by UV-C

treatment (PMID: 15386344).



Dot Blot - Anti-JNK1 (phospho T183 + Y185) antibody [EPR20763] (ab215208)

Dot blot analysis of JNK1 (phospho T183+ Y185) labeled with ab215208 at 1/1000 dilution.

Lane 1: JNK1 (phospho T183/Y185) peptide.

Lane 2: JNK1 (phospho T183) peptide.

Lane 3: JNK1 (phospho Y185) peptide.

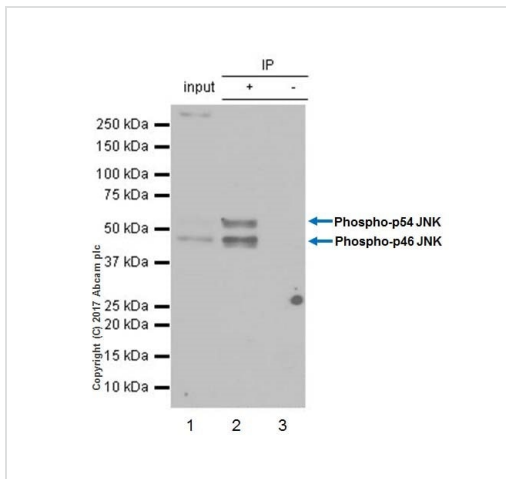
Lane 4: JNK1 non-phospho peptide.

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100,000 dilution was used as secondary antibody.

Based on sequence homology this antibody also reacts with JNK2 (phospho T183/Y185) and JNK3 (phospho T221/Y223).

Blocking and dilution buffer: 5% NFD/MTBST.

Exposure time: 3 minutes.



Immunoprecipitation - Anti-JNK1 (phospho T183 + Y185) antibody [EPR20763] (ab215208)

JNK1 (phospho T183 + Y185) was immunoprecipitated from 0.35mg of HEK-293 (human epithelial cell line from embryonic kidney) treated with 40 J/m² UV-C light, then cultivated in RPMI 1640 media containing 10% FBS for 30 minutes whole cell lysate with ab215208 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab215208 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10,000 dilution.

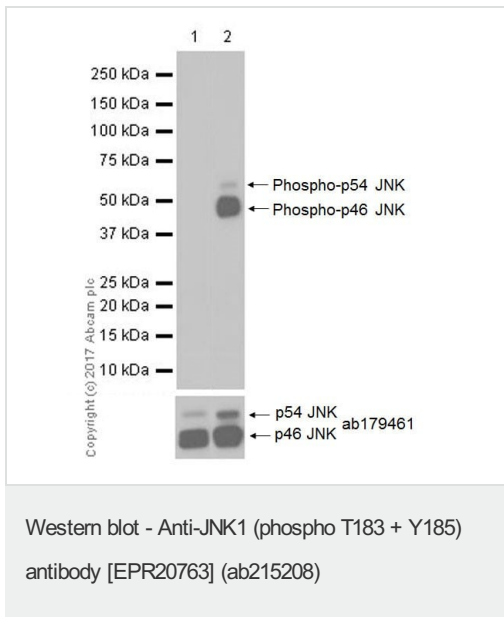
Lane 1: HEK-293 (human epithelial cell line from embryonic kidney) treated with 40 J/m² UV-C light, then cultivated in RPMI 1640 media containing 10% FBS for 30 minutes whole cell lysate 10 µg (Input).

Lane 2: ab215208 IP in HEK-293 treated with 40 J/m² UV-C light, then cultivated in RPMI 1640 media containing 10% FBS for 30 minutes whole cell lysate (+).

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab215208 in HEK-293 treated with 40 J/m² UV-C light, then cultivated in RPMI 1640 media containing 10% FBS for 30 minutes whole cell lysate (-).

Blocking and dilution buffer and concentration: 5% NFD/MTBST.

Exposure time: 3 minutes.



All lanes : Anti-JNK1 (phospho T183 + Y185) antibody [EPR20763] (ab215208) at 1/1000 dilution

Lane 1 : Untreated U-2 OS (human bone osteosarcoma epithelial cell line) cultivated in RPMI 1640 media containing 10% FBS for 2 hours, whole cell lysate

Lane 2 : U-2 OS treated with 50 J/m² UV-C light, then cultivated in RPMI 1640 media containing 10% FBS for 2 hours, whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 48 kDa

Observed band size: 46, 54 kDa [why is the actual band size different from the predicted?](#)

Blocking/Dilution: 5% NFDm/TBST.

Phosphorylation of JNK at T183/Y185 can be induced by UV-C treatment (PMID: 15386344).

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-JNK1 (phospho T183 + Y185) antibody
[EPR20763] (ab215208)

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

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