Anti-JNK1+JNK2 (phospho T183 + Y185) antibody

**Product name** Anti-JNK1+JNK2 (phospho T183 + Y185) antibody

**Description** Rabbit polyclonal to JNK1+JNK2 (phospho T183 + Y185)

**Host species** Rabbit

**Specificity** The region of JNK1 and JNK2 surrounding T183 + Y185 has a high degree of similarity to the corresponding regions in JNK3 and thus may cross react with this protein if phosphorylated on the corresponding residues.

**Tested applications** Suitable for: IHC-P, WB, ICC/IF

**Species reactivity** Reacts with: Mouse, Rat, Human

**Immunogen** Synthetic peptide from around the phosphorylation sites of threonine 183/tyrosine 185 (M-M-T(p)-P-Y(p)-V-V) of Human JNK1+JNK2 (NP_002741.1, NP_001128516.1, NP_002744.1)

**Positive control** HeLa cells, C6 cells treated with anisomycin IHC-P: FFPE mouse brain tissue sections.

**Form** Liquid

**Storage instructions** Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

**Storage buffer** pH: 7.40
Preservative: 0.02% Sodium azide
Constituents: 48% PBS, 50% Glycerol, 0.88% Sodium chloride
Note: PBS without Mg²⁺ and Ca²⁺

**Purity** Immunogen affinity purified

**Purification notes** This antibody was purified by affinity chromatography using epitope-specific phosphopeptide. Non-phosphospecific antibodies were removed by chromatography using non-phosphopeptide.

**Clonality** Polyclonal

**Isotype** IgG
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).

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.

Applications
Our Abpromise guarantee covers the use of ab131499 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>IHC-P</td>
<td></td>
<td>Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.</td>
</tr>
<tr>
<td>WB</td>
<td>★★★★☆☆☆☆☆</td>
<td>1/500 - 1/1000. Predicted molecular weight: 46, 54 kDa.</td>
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<tr>
<td>ICC/IF</td>
<td>1/100 - 1/200.</td>
<td></td>
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</tbody>
</table>

Target

Images
**Western blot - Anti-JNK1+JNK2 (phospho T183 + Y185) antibody (ab131499)**

**All lanes:** Anti-JNK1+JNK2 (phospho T183 + Y185) antibody (ab131499) at 1/500 dilution

**Lane 1:** C6 cells treated with anisomycin

**Lane 2:** Untreated C6 cells

**Predicted band size:** 46, 54 kDa

**Secondary antibody - anti-rabbit HRP (ab6721)**

**Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-JNK1+JNK2 (phospho T183 + Y185) antibody (ab131499)**

IHC image of JNK1 + JNK2 (phospho T183 + Y185) staining in mouse brain formalin fixed paraffin embedded tissue section, performed on a Leica Bond system using the standard protocol B. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab131499, 1µg/ml, for 15 mins at room temperature. A goat anti-rabbit biotinylated secondary antibody was used to detect the primary, and visualized using an HRP conjugated ABC system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

**Immunofluorescence - Anti-JNK1+JNK2 (phospho T183 + Y185) antibody (ab131499)**

Immunofluorescence analysis of methanol fixed HeLa cells labelled with ab131499 at 1/100 dilution.
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