

## DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human, mouse, and rat JNK2, expressed as p46 JNK (isoforms 2 and/or 3, both 382 aa) and p54 JNK (isoforms 1 and/or 4, both 424 aa) in Western blots. Does not detect recombinant JNK1 or JNK3.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 252320
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human JNK2 isoform 2
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

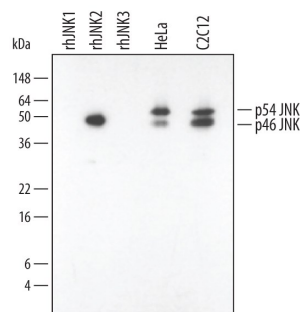
## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.2 µg/mL	See Below
<b>Immunocytochemistry</b>	8-25 µg/mL	See Below
<b>Knockout Validated</b>	JNK2 is specifically detected in HEK293T human embryonic kidney parental cell line but is not detectable in JNK2 knockout HEK293T cell line.	

## DATA

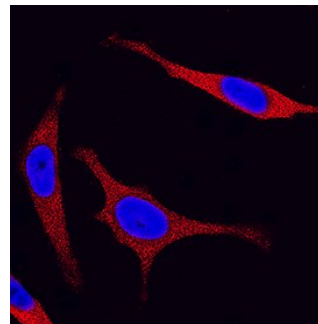
### Western Blot



### Detection of Human, Mouse, and Rat JNK2 by Western Blot.

Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line and C2C12 mouse myoblast cell line. PVDF membrane was probed with 0.2 µg/mL Mouse Anti-Human/Mouse/Rat JNK2 Monoclonal Antibody (Catalog # MAB1846) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). For additional reference, recombinant human JNK1, JNK2, and JNK3 (1 ng/lane) were included. Specific bands for JNK2 were detected at approximately 46 and 54 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

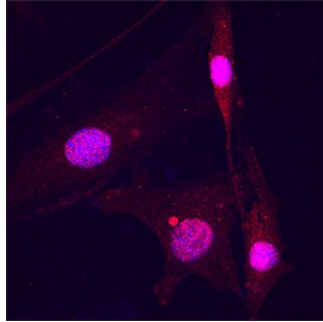
### Immunocytochemistry



### JNK2 in HeLa Human Cell Line.

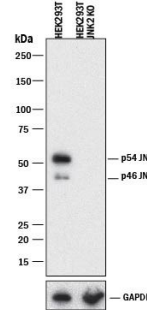
JNK2 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Mouse Anti-Human/Mouse/Rat JNK2 Monoclonal Antibody (Catalog # MAB1846) at 25 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

**Immunocytochemistry**



**JNK2 in C2C12 Mouse Cell Line.** JNK2 was detected in immersion fixed C2C12 mouse myoblast cell line using Mouse Anti-Human/Mouse/Rat JNK2 Monoclonal Antibody (Catalog # MAB1846) at 25 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. Staining was performed using our protocol for Fluorescent ICC Staining of Non-adherent Cells.

**Knockout Validated**



**Western Blot Shows Human JNK2 Specificity by Using Knockout Cell Line.** Western blot shows lysates of HEK293T human embryonic kidney parental cell line and JNK2 knockout HEK293T cell line (KO). PVDF membrane was probed with 0.2 µg/mL of Mouse Anti-Human/Mouse/Rat JNK2 Monoclonal Antibody (Catalog # MAB1846) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). Specific bands were detected for JNK2 at approximately 45 and 54 kDa (as indicated) in the parental HEK293T cell line, but is not detectable in knockout HEK293T cell line. GAPDH (Catalog # MAB5718) is shown as a loading control. This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

The c-Jun N-terminal kinases (JNKs) are encoded by three genes: JNK1, JNK2, and JNK3. Members of the MAPK superfamily, JNKs are activated by environmental stresses and inflammatory cytokines. JNK1, also known as SAPK1γ and MAPK8, is expressed as four isoforms generated by alternative splicing. JNK1 is activated by dual phosphorylation at T183 and Y185 by the MAPK kinases MKK4 and/or MKK7.