

# Anti-JNK (Thr-183/Tyr-185), Phosphospecific Antibody Catalog # AN1829

# Specification

# Anti-JNK (Thr-183/Tyr-185), Phosphospecific Antibody - Product Information

Application WB
Primary Accession P45983
Reactivity Bovine
Host Mouse

Clonality Mouse Monoclonal

Isotype IgG1
Calculated MW 48296

## Anti-JNK (Thr-183/Tyr-185), Phosphospecific Antibody - Additional Information

Gene ID **5599** 

**Other Names** 

SAPK1, p49MAPK, MAPK, Mitogen-activated protein kinase 8, c-Jun N-terminal kinase 1, Stress-activated protein kinase INK1, Stress-activated protein kinase 1c (SAPK1c), INK46

## **Target/Specificity**

The stress-activated protein kinases (SAPK) or Jun-amino-terminal kinases (JNK) are potently activated by stressors such as UV and gamma radiation. Similar to other MAP Kinases, the core signaling unit is composed of a MAPKKK, usually MEKK1-4 or a mixed lineage kinase (MLK), which phosphorylate and activate MKK4-7, leading to dual phosphorylation and activation of JNK kinases. Rho-GTPases (Rac1 and cdc42) can stimulate MEKKs and MLKs, while MKKs can be activated by a GTPase-independent pathway that involves the germinal center kinase family. There are three JNK genes (JNK1, 2, 3) with further diversification resulting from alternative splicing. Active JNK dimers can translocate to the nucleus to regulate transcription through phosphorylation of c-Jun, ATF-2 and other transcription factors.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Anti-JNK (Thr-183/Tyr-185), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **Shipping**

Blue Ice

# Anti-JNK (Thr-183/Tyr-185), Phosphospecific Antibody - Protocols

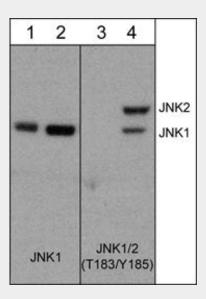
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides

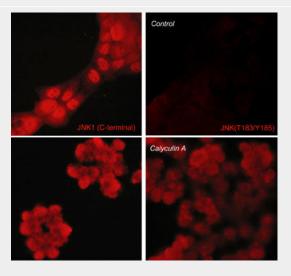


- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Anti-JNK (Thr-183/Tyr-185), Phosphospecific Antibody - Images



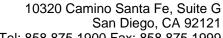
Western blot analysis of PC12 cells untreated (lanes 1 & 3) or treated with calyculin A (100 nM) for 30 minutes (lanes 2 & 4). The blot was probed with anti-JNK1 (lanes 1 & 2) or anti-JNK1 (T183/Y185) (lanes 3 & 4).

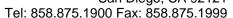


Immunocytochemical labeling of JNK in control (Top row) or calyculin A-treated A431 cells (Bottom row). The cells were labeled with mouse monoclonal JNK (C-terminal region) (Left) or mouse monoclonal JNK (Thr-183/Tyr-185) (Right). The antibodies were detected using goat anti-mouse DyLight® 594.

## Anti-JNK (Thr-183/Tyr-185), Phosphospecific Antibody - Background

The stress-activated protein kinases (SAPK) or Jun-amino-terminal kinases (JNK) are potently activated by stressors such as UV and gamma radiation. Similar to other MAP Kinases, the core signaling unit is composed of a MAPKKK, usually MEKK1-4 or a mixed lineage kinase (MLK), which







phosphorylate and activate MKK4-7, leading to dual phosphorylation and activation of JNK kinases. Rho-GTPases (Rac1 and cdc42) can stimulate MEKKs and MLKs, while MKKs can be activated by a GTPase-independent pathway that involves the germinal center kinase family. There are three JNK genes (JNK1, 2, 3) with further diversification resulting from alternative splicing. Active JNK dimers can translocate to the nucleus to regulate transcription through phosphorylation of c-Jun, ATF-2 and other transcription factors.