SANTA CRUZ BIOTECHNOLOGY, INC.

p-JNK (Thr 183/Tyr 185): sc-12882



BACKGROUND

The mitogen-activated protein (MAP) kinases ERK-1 and ERK-2 are prolinedirected kinases that are activated through concomitant phosphorylation of tyrosine and threonine residues. The JNK family, which includes JNK1, JNK2 and JNK3, is distantly related to the MAP kinase family, members of which are activated by dual phosphorylation at a Thr-Pro-Tyr motif, specifically at Thr 183 and Tyr 185 residues, in response to ultraviolet (UV) light. This motif is divergent from the Thr-Glu-Tyr motif characteristic of the MAP kinase family. JNK is phosphorylated by JNK-activating kinase (JNKK1 and JNKK2), which are members of the MEK family. Activated JNK mediates the phosphorylation of c-Jun at the amino-terminal serine regulatory sites, Ser 63 and Ser 73, which stimulates the transactivation function of c-Jun.

SOURCE

p-JNK (Thr 183/Tyr 185) is available as either goat (sc-12882) or rabbit (sc-12882-R) polyclonal affinity purified antibody raised against a short amino acid sequence containing Thr 183 and Tyr 185 phosphorylated JNK of human origin.

PRODUCT

Each vial contains either 100 μ g (sc-12882) or 200 μ g (sc-12882-R) lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-12882 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

p-JNK (Thr 183/Tyr 185) is recommended for detection of Thr 183 and Tyr 185 phosphorylated JNK1 and correspondingly phosphorylated JNK2 and JNK3 of mouse, rat, human, *Drosophila melanogaster, Xenopus laevis*, zebrafish and *Caenorhabditis elegans* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of p-JNK p46 isoform: 46 kDa.

Molecular Weight of p-JNK p54 isoform: 54 kDa.

Positive Controls: NIH/3T3 + anisomycin cell lysate: sc-2247, NIH/3T3 whole cell lysate: sc-2210 or NIH/3T3 + UV cell lysate: sc-3804.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA





Western blot analysis of JNK phosphorylation in untreated (**A**,**D**), anisomycin treated (**B**,**E**) and anisomycin and lambda protein phosphatase (sc-200312A) treated (**C**,**F**) NIH/3T3 whole cell lysates. Antibodies tested include p-JNK (Thr 183/Tyr 185): sc-12882-R (**A**,**B**,**C**) and JNK (**D**-2): sc-7345 (**D**,**E**,**F**). Western blot analysis of JNK phosphorylation in untreated (**A**,**D**), UV treated (**B**,**E**) and UV and lambda protein phosphatase (sc-200312A) treated (**C**,**F**) Hela whole cell lysates. Antibodies tested include p-JNK (Thr 185): sc-12882 (**A**,**B**,**C**) and JNK (D-2): sc-7345 (**D**, **E**,**F**).

SELECT PRODUCT CITATIONS

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- Andújar, I., et al. 2010. Shikonin reduces oedema induced by phorbol ester by interfering with IκB-α degradation thus inhibiting translocation of NFκB to the nucleus. Br. J. Pharmacol. 160: 376-388.
- 3. Mraiche, F., et al. 2011. Activated NHE1 is required to induce early cardiac hypertrophy in mice. Basic Res. Cardiol. 106: 603-616.
- 4. Xin, W., et al. 2011. Attenuation of endoplasmic reticulum stress-related myocardial apoptosis by SERCA2 α gene delivery in ischemic heart disease. Mol. Med. 17: 201-210.
- Chiang, H.M., et al. 2011. *Coffea arabica* extract and its constituents prevent photoaging by suppressing MMPs expression and MAP kinase pathway. Food Chem. Toxicol. 49: 309-318.
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- Kilic, U., et al. 2012. Evidence that membrane-bound G protein-coupled melatonin receptors MT1 and MT2 are not involved in the neuroprotective effects of melatonin in focal cerebral ischemia. J. Pineal Res. 52: 228-235.
- Wen, K.C., et al. 2012. Ixora parviflora protects against UVB-induced photoaging by inhibiting the expression of MMPs, MAP kinases, and COX-2 and by promoting type I procollagen synthesis. Evid. Based Complement. Alternat. Med. 2012: 417346.

MONOS Satisfation Guaranteed

Try **p-JNK (G-7): sc-6254** or **p-JNK (89.Thr 183/ Tyr 185): sc-293138**, our highly recommended monoclonal aternatives to p-JNK (Thr 183/Tyr 185). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **p-JNK (G-7): sc-6254**.