Store at -20°C

#3708

JNK1 (2C6) Mouse mAb

☑ 100 µl
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

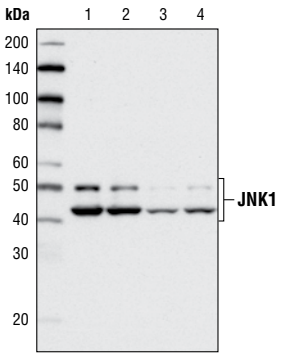
Entrez-Gene ID #6774
Swiss-Prot Acc. #P40763

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W Endogenous	H, M, R, Mk	46, 54 kDa	Mouse IgG1**

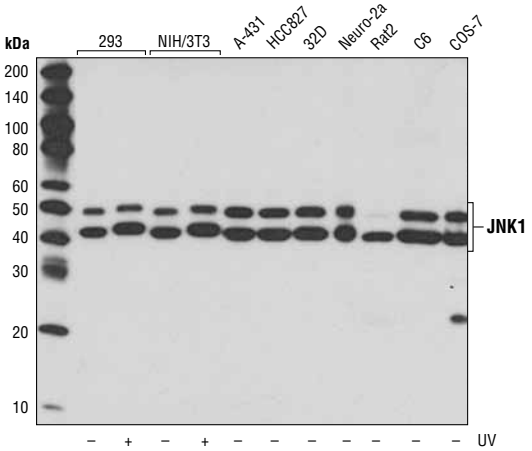
Background: The stress-activated protein kinase/Jun-amino-terminal kinase SAPK/JNK is potently and preferentially activated by a variety of environmental stresses including UV and gamma radiation, ceramides, inflammatory cytokines and in some instances, by growth factors and GPCR agonists (1-6). As with the other MAPKs, the core signaling unit is composed of a MAPKKK, typically MEKK1-MEKK4, or by one of the mixed lineage kinases (MLKs), which phosphorylate and activate MKK4/7. Upon activation, MKKs phosphorylate and activate the SAPK/JNK kinase (2). Stress signals are delivered to this cascade by small GTPases of the Rho family (Rac, Rho, cdc42) (3). Both Rac1 and cdc42 mediate the stimulation of MEKKs and MLKs (3). Alternatively, MKK4/7 can be activated in a GTPase independent mechanism via stimulation of a germinal center kinase (GCK) family member (4). There are three SAPK/JNK genes each of which undergoes alternative splicing resulting in numerous isoforms (3). SAPK/JNK, when active as a dimer, can translocate to the nucleus and regulate transcription through its effects on c-Jun, ATF-2 and other transcription factors (3,5).

Specificity/Sensitivity: JNK1 (2C6) Mouse mAb detects endogenous levels of total JNK1 protein.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a recombinant protein corresponding to the amino terminus of human JNK1.



Western blot analysis of HeLa cell extracts, untransfected (lane 1), mock-transfected (lane 2) or transfected with SignalSilence® SAPK/JNK siRNA I #6232 (lane 3) or SignalSilence® SAPK/JNK siRNA II #6233 (lane 4) for 72 hours, using JNK1 (2C6) Mouse mAb.



Western blot analysis of extracts from indicated cell lines, untreated or UV-treated (40 J/m², 30 min recovery), using JNK1 (2C6) Mouse mAb.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. *Do not aliquot the antibody.*

***Species cross-reactivity is determined by western blot.**

****Anti-mouse secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

Background References:

(1) Davis, R.J. (1999) *Biochem Soc Symp* 64, 1-12.
(2) Ichijo, H. (1999) *Oncogene* 18, 6087-93.
(3) Kyriakis, J.M. and Avruch, J. (2001) *Physiol Rev* 81, 807-69.
(4) Kyriakis, J.M. (1999) *J Biol Chem* 274, 5259-62.
(5) Leppä, S. and Bohmann, D. (1999) *Oncogene* 18, 6158-62.
(6) Whitmarsh, A.J. and Davis, R.J. (1998) *Trends Biochem Sci* 23, 481-5.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

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Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide

Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—Horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.