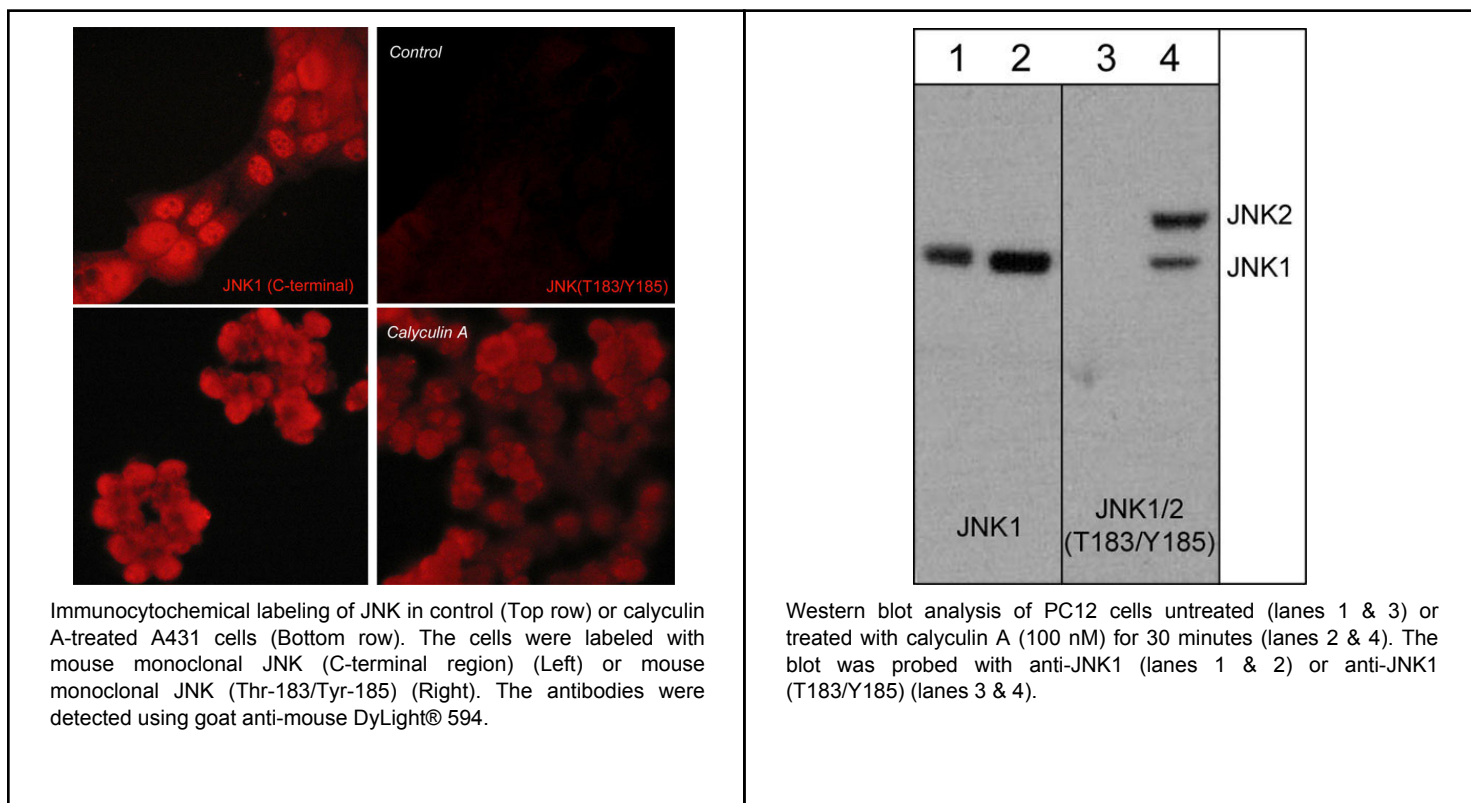


## Background

The stress-activated protein kinases (SAPK) or Jun-amino-terminal kinases (JNK) are potentially 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.

## Background References

- Whitmarsh, A.J. & Davis, R.J. (1998) Trends Biochem. Sci. 23:481.  
 Davis, R.J. (1999) Biochem. Soc. Symp. 64:1.  
 Ichijo, H. (1999) Oncogene 18:6087.  
 Kyriakis, J.M. (1999) J. Biol. Chem. 274:5259.



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**Immunogen****Uniprot ID: P45983**

Clone M268 was generated from a dual phosphorylated peptide corresponding to amino acid residues surrounding Thr-183 and Tyr-185 in human JNK1. This sequence has high homology to the conserved site in rat and mouse JNK1 and JNK2.

**Buffer and Storage**

Mouse monoclonal purified with protein A chromatography is supplied in 100µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at -20°C. Stable for 1 year.

**Applications**

WB	1:1000
ELISA	1:2000
ICC	1:100

**Species Reactivity**

Hu, Rt, Ms

**Isotype:** IgG1

End user should determine optimal dilution for their particular applications and experiments.

Western blot membranes were incubated with diluted antibody in 5% non-fat milk, Tris buffer, 0.04% Tween20 for 1 hour at room temperature.

Abbreviations: E = ELISA, ICC = immunocytochemistry, IHC = immunohistochemistry, IP = immunoprecipitation, MS = mass spectrometry, WB = western blot  
Hu = Human, Ms = Mouse, Rt = Rat, Ck = Chicken, F = Frog, B = Bovine

**Specificity**

This antibody detects 46 and 54 kDa\* proteins corresponding to the apparent molecular mass of JNK1 and JNK2 on SDS-PAGE immunoblots of human A431 and HeLa cells, as well as rat PC12 cells treated with calyculin A.

\*All molecular weights (MW) are confirmed by comparison to MW standards and to western blot mobilities of known proteins with similar MW.

"Native" western blot utilizes non-reducing sample buffer (no mercaptoethanol or SDS), normal SDS-PAGE gel electrophoresis, and no methanol in transfer buffers.

**Related Products**

JM2671 JNK1 (C-terminal region) Mouse Monoclonal

EM2061 ERK1 (Thr-202/Tyr-204)[conserved], phospho-specific Mouse Monoclonal

EM2331 ERK1 (C-terminal region) Mouse Monoclonal

PM1391 p38 MAP Kinase (Thr-180/Tyr-182), phospho-specific Mouse Monoclonal

PM1381 p38α MAP Kinase (C-terminal) M138 Mouse Monoclonal

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