

# Mouse (monoclonal) Anti-JNK1/2 Unconjugated

# PRODUCT ANALYSIS SHEET

Catalog Number: AHO1362

**Lot Number:** See product label

**Quantity/Volume:**  $100 \mu g/0.2 \text{ mL}$ 

Clone Number: 279Q38

**Isotype:** IgG1  $\kappa$  (mouse)

Form of Antibody: Purified immunoglobulin in phosphate buffered saline, pH 7.2, with 1% bovine serum

albumin.

**Preservation:** 0.1% sodium azide (Caution: sodium azide is a poisonous and hazardous substance.

Handle with care and dispose of properly.)

**Purification:** Purified from ascites by affinity chromatography.

**Immunogen:** Recombinant fragment of human JNK1α1 expressed in *E. coli*.

Specificity: JNK (c-Jun N-terminal Kinase), also referred to as Stress Activated Protein Kinase

(SAPK), is one of the main mitogen-activated protein kinases (MAPKs) in mammals. JNK is expressed as ten different isoforms due to differential mRNA splicing. The predominant forms are JNK1 and JNK2. JNK is activated by a variety of cellular signals including growth factors, inflammatory cytokines, and environmental stress. The JNK/SAPK signaling pathway involves sequential activation of MAPK kinase kinase (MEKK1), MAPK kinase 4 (MKK4) or MKK7, SAPK/JNK, and c-Jun. Full activation of JNK requires phosphorylation of a threonine and a tyrosine residue in the motif Thr-Pro-Tyr. MKK7 and MKK4 phosphorylate JNK at threonine 183 and tyrosine 185, respectively. The JNK pathway functions to modulate cell cycle, apoptotic and

transcriptional responses to stress.

This antibody binds to both JNK1 and JNK2 proteins of M<sub>r</sub>=46 and 54 kDa.

**Species Reactivity:** Human, mouse and rat.

**Applications:** This antibody is suitable for use in Western blotting.

**Suggested Working** 

**Dilutions:** 

For Western blotting, the recommended concentration is 1 µg/mL. The optimal antibody

concentration should be determined for each specific application.

**Recommended Positive** 

**Control:** 

Human Jurkat cells, mouse L929 cells and rat L6 cells.

Storage: Store at 2-8°C. For long term storage, aliquot into small volumes and store at -20°C.

Avoid repeated freeze-thaw cycles to prevent denaturing the antibody.

This product is for research use only. Not for use in diagnostic procedures.

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### **References:**

Choudhury, B.K., et al. (2002) In vivo role of p38 mitogen-activated protein kinase in mediating the anti-inflammatory effects of CpG oligodeoxynucleotide in murine asthma. J. Immunol. 169(10):5955-5961.

Janulis, M., et al. (2001) A novel mitogen-activated protein kinase is responsive to Raf and mediates growth factor specificity. Mol. Cell. Biol. 21(6):2235-2247.

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Pearce, A.K. and T.C. Humphrey (2001) Integrating stress-response and cell-cycle checkpoint pathways. Trends Cell. Biol. 11(10):426-433.

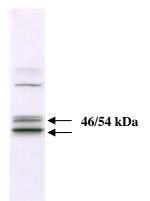
Barr, R.K. and M.A. Bogoyevitch (2001) The c-Jun N-terminal protein kinase family of mitogen activated protein kinases (JNK MAPKs). Int. J. Biochem. Cell. Biol. 33(11):1047-1063.

Dong, C., et al. (2001) Signaling by the JNK group of MAP kinases. c-Jun N-terminal kinase. J. Clin. Immunol. 21(4):253-257.

Cobb, M.H. (1999) MAP kinase pathways. Prog. Biophys. Mol. Biol. 71(3-4):479-500.

### **Related Products:**

JNK1/2 (total) ELISA Kit	Cat. #	KHO0121
JNK1/2 [pTpY <sup>183/185</sup> ] phosphoELISA <sup>TM</sup> Kit	Cat. #	KHO0131
JNK1/2 (total) Luminex <sup>TM</sup> Assay	Cat. #	LHO0071
JNK1/2 [pTpY <sup>183/185</sup> ] Luminex <sup>TM</sup> Assay	Cat. #	LHO0081
AKT, JNK1/2, p38 MAPK (total) 3-Plex Luminex <sup>TM</sup> Assay	Cat. #	LHO0051
AKT, JNK1/2, p38 MAPK (phospho) 3-Plex Luminex <sup>TM</sup> Assay	Cat. #	LHO0061
JNK1/2 [pTpY <sup>183/185</sup> ] Phosphorylation Site Specific Antibody	Cat. #	44-682G
c-Jun [pS73] Phosphorylation Site Specific Antibody	Cat. #	44-292
MEK4 [pSpT <sup>257/261</sup> ] Phosphorylation Site Specific Antibody	Cat. #	44-474
MEK7 [pSpT <sup>271/275</sup> ] Phosphorylation Site Specific Antibody	Cat. #	44-478
JNK2 Mouse Monoclonal Antibody	Cat. #	AHO1162
JNK1 Mouse Monoclonal Antibody	Cat. #	AHO1372
MAPK Phosphorylation Site Specific Antibody Sampler Pack	Cat. #	44-683G
Stress Phosphorylation Site Specific and Cleavage Site Specific Antibody Sampler Pack	Cat. #	44-648



## **Western Blot Analysis**

Proteins from cell extract of human Jurkat cells were resolved by SDS-PAGE and transferred to PVDF. The membranes were incubated with this JNK1/2 monoclonal antibody (clone 279Q38) at a concentration of 1  $\mu$ g/mL for two hours at room temperature. After washing, the membranes were incubated with a goat F(ab')<sub>2</sub> antimouse IgG alkaline phosphatase conjugated antibody (Cat. # AMI4405) at a 1:2000 dilution. Bands were detected with CDP-substrate using the WesternStar<sup>TM</sup> method (Tropix) and Kodak BioMax film.

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(Rev 10/08) DCC-08-1089