3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

Anti-JNK antibody
Mouse monoclonal, clone 1C2
purified from hybridoma cell culture

Product Number **SAB4200176**

Product Description

Anti-JNK antibody, Mouse monoclonal, (mouse IgG2a isotype) is derived from the hybridoma 1C2 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a recombinant protein corresponding to a fragment of human JNK1 (GeneID: 5599). The corresponding sequence is identical in mouse and shares 83% homology with human JNK2 (GeneID: 5601). The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Product Number ISO2. The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Anti-JNK antibody, Mouse monoclonal recognizes human, mouse, and rat JNK1 (43 kDa) and/or JNK2 (55 kDa). The antibody may be used in several immunochemical techniques including immunoblotting.

JNK1 (c-Jun N-terminal kinase), also known as MAPK8, is a member of the MAP kinase family. MAP kinases act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation, and development. JNK1 is activated by various cell stimuli, and targets specific transcription factors, and thus mediates immediate-early gene expression in response to cell stimuli. The activation of JNK1 by tumor-necrosis factor-α (TNF-α) is found to be required for TNF-α induced apoptosis. JNK1 is also involved in UV radiation induced apoptosis, which is thought to be related to cytochrome C-mediated cell death pathway. Studies on mouse *JNK1* gene suggested that it plays a key role in T cell proliferation, apoptosis, and differentiation. Four alternatively spliced transcript variants encoding distinct isoforms have been reported.[1-3]

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody concentration: ~1.0 mg/mL

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at –20 °C. For continuous use, store at 2–8 °C for up to one month. For extended storage, freeze at –20 °C in working aliquots. Repeated freezing and thawing, or storage in “frost-free” freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 1-2 μg/mL is recommended using whole extracts of mouse NIH-3T3 cells.

Note: In order to obtain best results in various techniques and preparations, it is recommended to determine optimal working dilutions by titration.

References

1. Krishna, M., and Narang, H., *Cell. Mol. Life Sci.*, **65**, 3525-3544 (2008).
2. Johnson, G.L. and Lapadat, R., *Science*, **298**, 1911-1912 (2002).
3. Bubici, C., et al., *Cell Cycle*, **3**, 1524-1529 (2004).

VS,DS,PHC,MAM 08/19-1