JNK1 (1A4) Mouse mAb

db6223 **Package : 50μL 100μL**

Product Name : JNK1 (1A4) Mouse mAb
Cat.No.: db6223
Synonyms : AI849689; c Jun N terminal kinase 1; C-JUN kinase 1; c-Jun N-terminal kinase 1; EC 271124; JAK 1A; JAK1A; JNK 1; JNK 46; JNK; JNK-46; JNK1A2; JNK21B1/2; MAP kinase 8; MAPK 8; MAPK8; Mitogen activated protein kinase 8; Mitogen-activated protein kinase 8; MK08_HUMAN; p54 gamma; PRKM 8; PRKM8; Protein kinase JNK1; Protein kinase; mitogen-activated; 8; SAPK 1; SAPK gamma; SAPK1; Stress activated protein kinase JNK1; Stress-activated protein kinase 1; Stress-activated protein kinase JNK1; Tyrosine protein kinase JAK1
Application : WB, ICC/IF
Reactivity : Human, Mouse, Rat
Host species : Mouse

Background

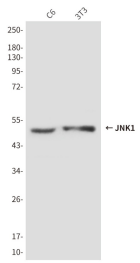
Serine/threonine-protein kinase involved in various processes such as cell proliferation, differentiation, migration, transformation and programmed cell death. Extracellular stimuli such as proinflammatory cytokines or physical stress stimulate the stress-activated protein kinase/c-Jun N-terminal kinase (SAP/JNK) signaling pathway. In this cascade, two dual specificity kinases MAP2K4/MKK4 and MAP2K7/MKK7 phosphorylate and activate MAPK8/JNK1. In turn, MAPK8/JNK1 phosphorylates a number of transcription factors, primarily components of AP-1 such as JUN, JDP2 and ATF2 and thus regulates AP-1 transcriptional activity. Phosphorylates the replication licensing factor CDT1, inhibiting the interaction between CDT1 and the histone H4 acetylase HBO1 to replication origins. Loss of this interaction abrogates the acetylation required for replication initiation. Promotes stressed cell apoptosis by phosphorylating key regulatory factors including p53/TP53 and Yes-associates protein YAP1. In T-cells, MAPK8 and MAPK9 are required for polarized differentiation of T-helper cells into Th1 cells. Contributes to the survival of erythroid cells by phosphorylating the antagonist of cell death BAD upon EPO stimulation. Mediates starvation-induced BCL2 phosphorylation, BCL2 dissociation from BECN1, and thus activation of autophagy. Phosphorylates STMN2 and hence regulates microtubule dynamics, controlling neurite elongation in cortical neurons. In the developing brain, through its cytoplasmic activity on STMN2, negatively regulates the rate of exit from multipolar stage and of radial migration from the ventricular zone. Phosphorylates several other substrates including heat shock factor protein 4 (HSF4), the deacetylase SIRT1, ELK1, or the E3 ligase ITCH. Phosphorylates the CLOCK-ARNTL/BMAL1 heterodimer and plays a role in the regulation of the circadian clock.

Immunogen Purified recombinant human JNK1 protein fragments expressed in E.coli

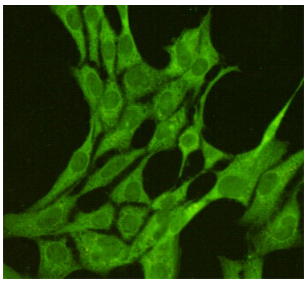
Gene ID 5599

Swiss Prot P45983

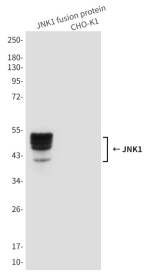
Synonyms	AI849689; c Jun N terminal kinase 1; C-JUN kinase 1; c-Jun N-terminal kinase 1; EC 271124; JAK 1A; JAK1A; JNK 1; JNK 46; JNK; JNK-46; JNK1A2; JNK21B1/2; MAP kinase 8; MAPK 8; MAPK8; Mitogen activated protein kinase 8; Mitogen-activated protein kinase 8; MK08_HUMAN; p54 gamma; PRKM 8; PRKM8; Protein kinase JNK1; Protein kinase; mitogen-activated; 8; SAPK 1; SAPK gamma; SAPK1; Stress activated protein kinase JNK1; Stress-activated protein kinase 1; Stress-activated protein kinase JNK1; Tyrosine protein kinase JAK1
Reactivity	Human, Mouse, Rat
Application	WB, ICC/IF
Recommended dilution	WB: 1:500-1:1000 ICC/IF: 1:50-1:200
Calculated MW	48 kDa
Observed MW	46,54 kDa
Host species	Mouse
Clonality	Monoclonal
Clonality No.	1A4-C5-F11
Isotype	IgG2a
Purity	Affinity Purification
Conjugation	Un-conjugated
Storage Stability	Store at -20°C. Supplied in PBS, 50% Glycerol(pH 7.3), 0.02% sodium azide and 0.5% BSA . Stable for 12 months from date of receipt.



Western blot analysis of JNK1 in C6 and 3T3 lysates using JNK1 antibody.



Immunofluorescence analysis of JNK1 (1A4) in 3T3 using JNK1 antibody.



Western blot analysis of JNK1 (1A4) in CHO-K1 cell lysates(B) and CHO-K1 transfected by JNK1fragment fusion protein(A) cell lysates using JNK1 antibody.