

氨基末端激酶 1/3 抗体

产品货号： mlR20760

英文名称： JNK1 + JNK3

中文名称： 氨基末端激酶 1/3 抗体

别名： JNK1 + JNK3; JNK1 + 3; JNK1+JNK3; JNK1/3; c Jun N terminal kinase 1; JNK1; JNK3; JAK 1A; JAK1A; JNK 1; JNK 46; JNK; JNK1A2; JNK21B1/2; MAPK 8; MAPK8; Mitogen activated protein kinase 8; PRKM 8; PRKM8; Protein kinase JNK1; SAPK 1; SAPK gamma; SAPK1; c-Jun; Stress activated protein kinase JNK1; Tyrosine protein kinase JAK1; MK08_HUMAN.

研究领域： 肿瘤 细胞生物 免疫学 信号转导 转录调节因子 激酶和磷酸酶

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Rat, Chicken, Pig, Cow, Horse, Rabbit, Sheep,

产品应用： WB=1:500-2000

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分 子 量 : 42kDa

细胞定位 : 细胞核 细胞浆

性 状 : Lyophilized or Liquid

浓 度 : 1mg/ml

免 疫 原 : KLH conjugated synthetic peptide derived from human JNK1 + JNK3:321-400/427

亚 型 : IgG

纯化方 法 : affinity purified by Protein A

储 存 液 : 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件 : Store at -20 ° C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20° C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ° C.

PubMed : PubMed

产品介绍： JNK1(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. This kinase 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 this kinase by tumor-necrosis factor alpha (TNF-alpha) is found to be required for TNF-alpha induced apoptosis. This kinase is also involved in UV radiation induced apoptosis, which is thought to be related to cytochrome c-mediated cell death pathway. Studies of the mouse counterpart of this gene suggested that this kinase play a key role in T cell proliferation, apoptosis and differentiation. Four alternatively spliced transcript variants encoding distinct isoforms have been reported. JNK1 is activated by threonine and tyrosine phosphorylation by either of two dual specificity kinases, MAP2K4 and MAP2K7. The JNK pathway is critically involved in diabetes and levels are abnormally elevated in obesity. The cell-permeable JNK inhibitory peptide may have promise as a therapeutic agent for diabetes.

Function:

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.

Subunit:

Binds to at least four scaffolding proteins, MAPK8IP1/JIP-1, MAPK8IP2/JIP-2, MAPK8IP3/JIP-3/JSAP1 and SPAG9/MAPK8IP4/JIP-4. These proteins also bind other components of the JNK signaling pathway. Forms a complex with MAPK8IP1 and RGNEF. Interacts with TP53 and WWOX. Interacts with JAMP. Interacts with NFATC4. Interacts with MECOM; regulates JNK signaling. Interacts with PIN1; this interaction mediates MAPK8 conformational changes leading to the binding of MAPK8 to its substrates. Interacts (phosphorylated form) with NFE2; the interaction phosphorylates NFE2 in undifferentiated cells.

Subcellular Location:

Cytoplasm. Nucleus.

Post-translational modifications:

Phosphorylated by TAOK2. Dually phosphorylated on Thr-183 and Tyr-185 by MAP2K7 and MAP2K4, which activates the enzyme.

Similarity:

Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily.

Contains 1 protein kinase domain.

SWISS:

P45983

Gene ID:

5599

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

产品图片

