JNK1/2/3 Rabbit mAb

Catalog No	YP-rAb-17654
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IF,IP,ELISA
Gene Name	MAPK8/9/10
Protein Name	Mitogen-activated protein kinase 8/9/10
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200;
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	MAPK8 ; JNK1 ; PRKM8 ; SAPK1 ; SAPK1C ; Mitogen-activated protein kinase 8 ; MAP kinase 8 ; MAPK 8 ; JNK-46 ; Stress-activated protein kinase 1c ; SAPK1c ; Stress-activated protein kinase JNK1 ; c-Jun N-terminal kinase 1 ; MAPK9 ; JNK2 ; PRKM9 ; SAPK1A ; Mi
Observed Band	48,53kD
Calculated Molecular Weight	48,53kD
Cell Pathway	Nucleus
Tissue Specificity	Brain,Epithelium,Fetal brain,Lung,Pooled,Testis,
Function	Catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,Domain:The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases.,enzyme regulation:Activated by threonine and tyrosine phosphorylation by either of two dual specificity kinases, MAP2K4 and MAP2K7. Inhibited by dual specificity phosphatases, such as DUSP1.,Function:JNK1 isoforms display different binding patterns: beta-1 preferentially binds to c-Jun, whereas alpha-1, alpha-2, and beta-2 have a similar low level of binding to both c-Jun or ATF2. However, there is no correlation between binding and phosphorylation, which is achieved at about the same efficiency by all isoforms.,Function:Responds to

activation by environmental stress and pro-inflammatory cytokines by phosphorylating a number of transcription factors, primarily components of AP-1 such as JUN, JDP2 and ATF2 and thus regulates AP-1 transcriptional activity. In T-cells, JNK1 and JNK2 are required for polarized differentiation of T-helper cells into Th1 cells (By similarity). Phosphorylates heat shock factor protein 4 (HSF4).,online information:C-Jun N-terminal kinases entry,PTM:Dually phosphorylated on Thr-183 and Tyr-185, which activates the enzyme.,similarity:Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily.,similarity:Contains 1 protein kinase domain.,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. Interacts with TP53 and WWOX. Interacts with JAMP. Forms a complex with MAPK8IP1 and RGNEF (By similarity). Interacts with NFATC4.,

Background

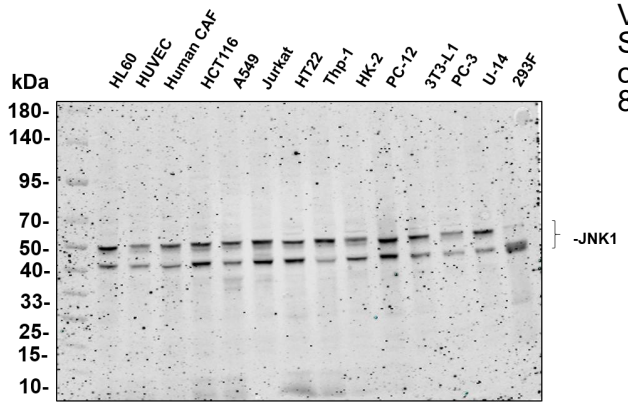
The protein encoded by this gene is a member of the MAP kinase family. MAP kinases act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. This kinase is activated 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 cytochrom 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. Several alternatively spl

matters needing attention

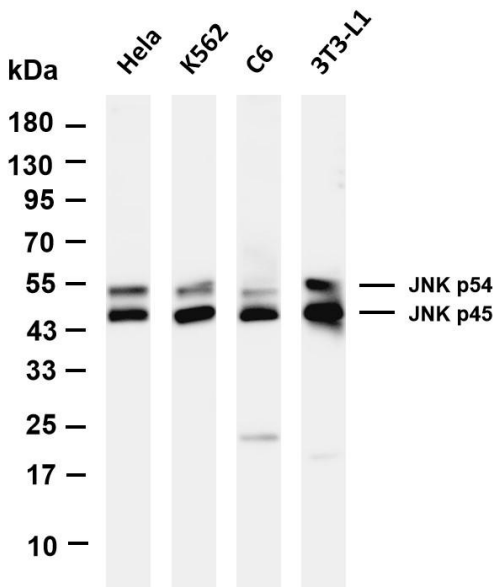
Avoid repeated freezing and thawing!

Usage suggestions

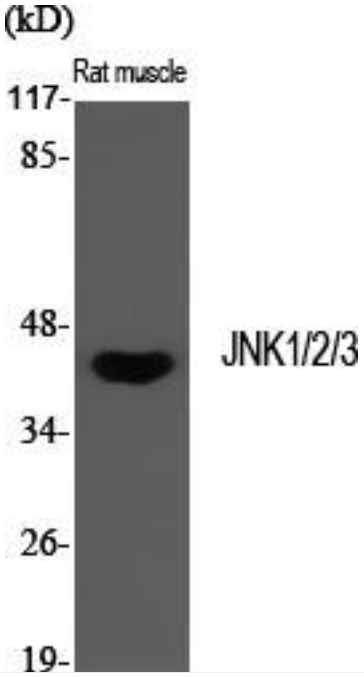
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



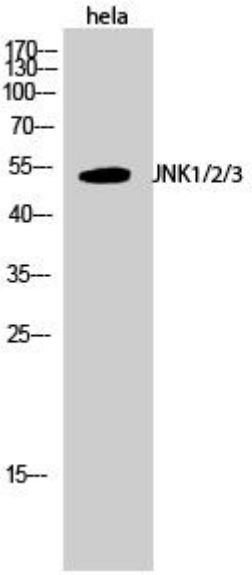
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4℃, over night with a 1:5000 dilution . The Dylight 800-conjugated Goat anti-Rabbit antibody



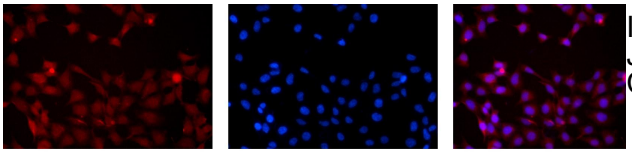
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-JNK1/2/3 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: K562 Lane 3: C6 Lane 4: 3T3-L1 Predicted band size: 48,53kDa Observed band size: 48,53kDa



Western Blot analysis of various cells using JNK1/2/3 Antibody diluted at 1:1000



Western Blot analysis of hela cells using JNK1/2/3 Antibody diluted at 1:1000



Immunofluorescence analysis of HEK293. Picture A: JNK1/2/3 antibody (red). Picture B: DAPI (blue). Picture C: Merge of A+B