Polyclonal Antibody Catalog #: APRab04908



### **Summary**

**Production Name** JNK1/2/3 (phospho Thr183) Rabbit Polyclonal Antibody

**Description** Rabbit Polyclonal Antibody

**Host** Rabbit

**Application** WB,IHC,IF,ELISA

**Reactivity** Human, Mouse, Rat, Chicken

### **Performance**

**Conjugation** Unconjugated

**Modification** Phospho Antibody

**Isotype** IgG

Clonality Polyclonal Form Liquid

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw Storage

cycles.

**Buffer** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.

**Purification** Affinity purification

#### **Immunogen**

Gene Name MAPK8/9/10

MAPK8; JNK1; PRKM8; SAPK1; SAPK1C; Mitogen-activated protein kinase 8; MAP

Alternative Names 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

**Gene ID** 5599/5601/5602

P45983/P45984/P53779.The antiserum was produced against synthesized peptide

SwissProt ID derived from human SAPK/JNK around the phosphorylation site of Thr183. AA

range:151-200

### **Application**

**Dilution Ratio** WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:5000. Not yet tested in

Polyclonal Antibody Catalog #: APRab04908



other applications.

Molecular Weight 46+54kD

### **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 splcatalytic 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.,

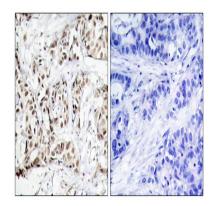
#### **Research Area**

Toll\_Like; Cell Growth; Stem cell pathway; Insulin Receptor; MAPK\_ERK\_Growth; MAPK\_G\_Protein; ErbB/HER; B Cell Receptor; SAPK\_JNK; WNT; WNT-T CELL; β-Catenin

#### **Image Data**

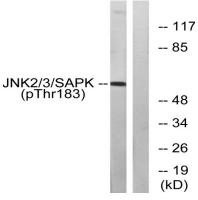
Polyclonal Antibody Catalog #: APRab04908



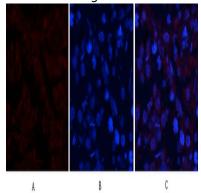


Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using SAPK/JNK (Phospho-Thr183)

Antibody. The picture on the right is blocked with the phospho peptide.



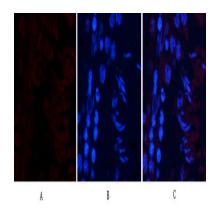
Western blot analysis of lysates from HeLa cells treated with Anisomycin 200ng/ml 10 ', using SAPK/JNK (Phospho-Thr183) Antibody. The lane on the right is blocked with the phospho peptide.



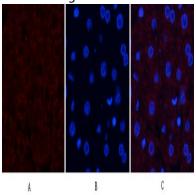
Immunofluorescence analysis of rat-testis tissue. 1,JNK1/2/3 (phospho Thr183) Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

Polyclonal Antibody Catalog #: APRab04908

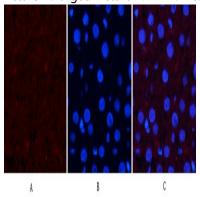




Immunofluorescence analysis of rat-testis tissue. 1,JNK1/2/3 (phospho Thr183) Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



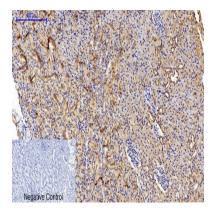
Immunofluorescence analysis of rat-liver tissue. 1,JNK1/2/3 (phospho Thr183) Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



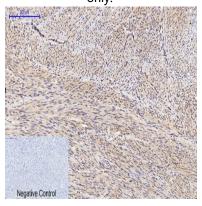
Immunofluorescence analysis of rat-liver tissue. 1,JNK1/2/3 (phospho Thr183) Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

Polyclonal Antibody Catalog #: APRab04908

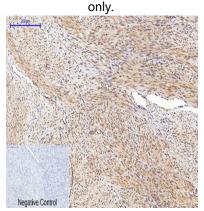




Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,JNK1/2/3 (phospho Thr183) Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1,JNK1/2/3 (phospho Thr183) Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody



Immunohistochemical analysis of paraffin-embedded Human-uterus-cancer tissue. 1,JNK1/2/3 (phospho Thr183) Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody

Polyclonal Antibody Catalog #: APRab04908



retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody only.

#### Note

For research use only.