

Product datasheet for **TA384744M**

JNK2 (MAPK9) Rabbit Monoclonal Antibody [Clone ID: R02-9H4]

Product data:

Product Type:	Primary Antibodies
Clone Name:	R02-9H4
Applications:	IHC, IP, WB
Recommended Dilution:	WB: 1/1000-1/2000 IHC: 1/20-1/50 IP: 1/20
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	A synthetic peptide of human JNK2
Formulation:	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Concentration:	lot specific
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Stability:	1 year
Predicted Protein Size:	Calculated MW: 48 kDa; Observed MW: 54 kDa
Gene Name:	mitogen-activated protein kinase 9
Database Link:	Entrez Gene 5601 Human P45984



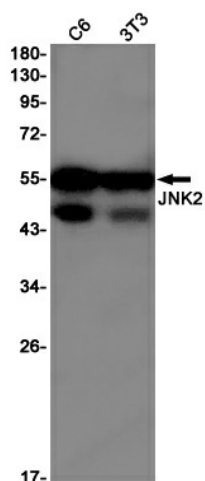
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Background:

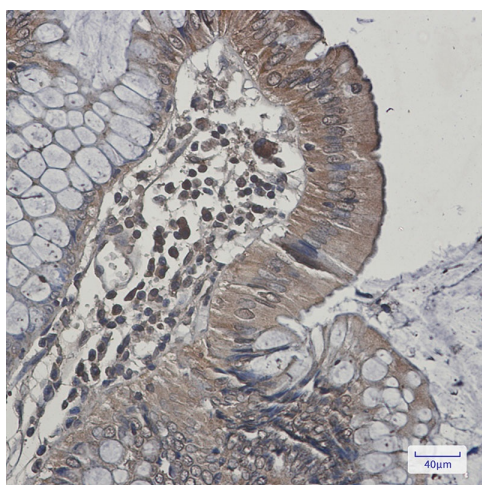
Swiss-Prot Acc.P45984.Serine/threonine-protein kinase involved in various processes such as cell proliferation, differentiation, migration, transformation and programmed cell death. Extracellular stimuli such as proinflammatory cytokines or physical stress stimulate the stress-activated protein kinase/c-Jun N-terminal kinase (SAP/JNK) signaling pathway. In this cascade, two dual specificity kinases MAP2K4/MKK4 and MAP2K7/MKK7 phosphorylate and activate MAPK9/JNK2. In turn, MAPK9/JNK2 phosphorylates a number of transcription factors, primarily components of AP-1 such as JUN and ATF2 and thus regulates AP-1 transcriptional activity. In response to oxidative or ribotoxic stresses, inhibits rRNA synthesis by phosphorylating and inactivating the RNA polymerase 1-specific transcription initiation factor RRN3. Promotes stressed cell apoptosis by phosphorylating key regulatory factors including TP53 and YAP1. In T-cells, MAPK8 and MAPK9 are required for polarized differentiation of T-helper cells into Th1 cells. Upon T-cell receptor (TCR) stimulation, is activated by CARMA1, BCL10, MAP2K7 and MAP3K7/TAK1 to regulate JUN protein levels. Plays an important role in the osmotic stress-induced epithelial tight-junctions disruption. When activated, promotes beta-catenin/CTNNB1 degradation and inhibits the canonical Wnt signaling pathway. Participates also in neurite growth in spiral ganglion neurons. Phosphorylates the CLOCK-ARNTL/BMAL1 heterodimer and plays a role in the regulation of the circadian clock (PubMed:22441692). Phosphorylates POU5F1, which results in the inhibition of POU5F1's transcriptional activity and enhances its proteosomal degradation .

Synonyms:

JNK-55; JNK2; JNK2A; JNK2ALPHA; JNK2B; JNK2BETA; OTTHUMP00000161542; OTTHUMP00000161543; p54a; p54aSAPK; PRKM9; SAPK

Product images:


Western blot analysis of JNK2 in C6, 3T3 lysates using JNK2 antibody.



Immunohistochemistry analysis of paraffin-embedded Human colon cancer using JNK2 antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.