

Anti-MAPK9 Polyclonal Antibody

Cat: K108292P

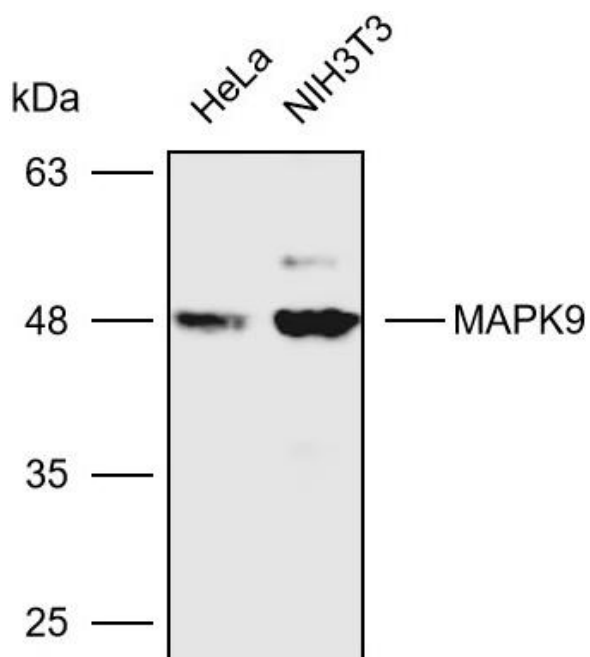
Summary:

【Product name】 : Anti-MAPK9 antibody	【Source】 : Rabbit
【Isotype】 : IgG	【Species reactivity】 : Human Mouse Rat
【Swiss Prot】 : P45984	【Gene ID】 : 5601
【Calculated】 : MW:27/44/48kDa	【Observed】 : MW:48kDa
【Purification】 : Octanoic acid-ammonium sulfate precipitation	
【Tested applications】 : WB IHC	
【Recommended dilution】 : WB 1:1000-3000. IHC 1:50-200.	
【WB Positive sample】 : Hela,NIH3T3	
【IHC Positive sample】 : Human liver cancer	
【Subcellular location】 : Cytoplasm Nucleus	
【Immunogen】 : A synthetic peptide of huma MAPK9	
【Storage】 : Shipped at 4°C. Upon delivery aliquot and store at -20°C	

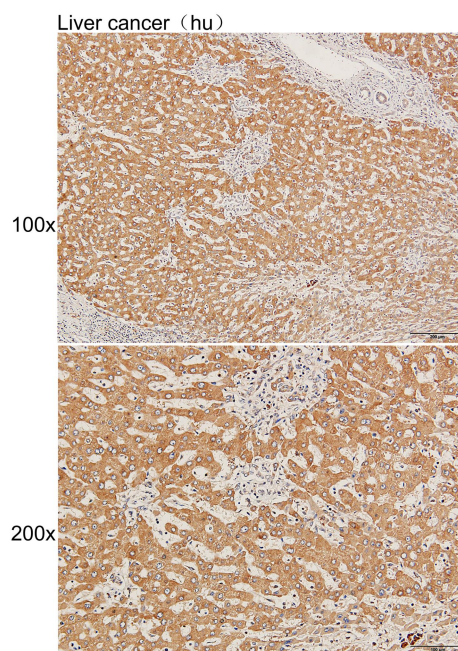
Background:

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 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. Phosphorylates POU5F1; which results in the inhibition of POU5F1's transcriptional activity and enhances its proteosomal degradation.

Verified picture



Western blot analysis with MAPK9 antibody diluted at 1:2000; Lane: HeLa, NIH3T3



Immunohistochemistry of paraffin-embedded Human liver cancer with MAPK9 antibody diluted at 1:100