

MAPK9

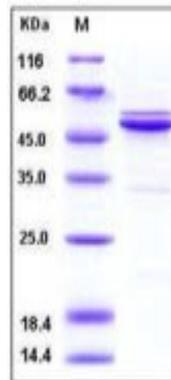
Recombinant Human Mitogen-activated Protein Kinase 9 (His Tag)

Catalog No.	CRH551A-His CRH551B-His	Quantity:	20 µg 50 µg
Alternate Names:	Mitogen-activated protein kinase 9, MAPK 9, JNK-55, Stress-activated protein kinase 1a, SAPK1a, Stress-activated protein kinase JNK2, c-Jun N-terminal kinase 2		
Description:	Mitogen-activated protein kinase 9 (MAPK9) is a member of MAP kinase subfamily belonging to the protein kinase superfamily. MAPK9 responds to activation by environmental stress and pro-inflammatory cytokines by phosphorylating a number of transcription factors, such as c-Jun and ATF2. MAPK9 deficiency leads to reduced c-Jun degradation, thereby augmenting c-Jun levels and cellular proliferation, and suggests that MAPK9 is a negative regulator of cellular proliferation in multiple cell types. MAPK9 prevents replicative stress by coordinating cell cycle progression and DNA damage repair mechanisms. MAPK9 blocks the ubiquitination of tumor suppressor p53, and thus increases the stability of p53 in nonstressed cells. MAPK9 negatively regulates antigen-specific CD8+ T cell expansion and effector function, and thus selectively blocking MAPK9 in CD8+ T cells may potentially enhance anti-tumor immune response. Lack of MAPK9 expression was associated with higher tumor aneuploidy and reduced DNA damage response. Additionally, the MAPK9 protein could be a novel therapeutic target in dry eye disease, and may provide a novel target for prevention of vascular disease and atherosclerosis.		
UniProt ID:	P45984		
Accession Number:	NP_002743.3		
Protein Construction:	A DNA sequence encoding the full length of human MAPK9 (Met 1-Arg 424) was fused with a polyhistidine tag at the C-terminus.		
Source:	Baculovirus-Insect Cells		
Formulation:	Lyophilized from sterile 50mM Tris, 100mM NaCl, pH 8.0, 10% glycerol, 0.5mM EDTA, 0.5mM PMSF Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants		
Molecular Weight:	The recombinant human MAPK9 consists of 435 amino acids and predicts a molecular mass of 49.5 kDa as estimated in SDS-PAGE under reducing conditions.		
Purity:	> 90 % as determined by SDS-PAGE.		
Endotoxin Level:	< 1.0 EU per µg protein as determined by the LAL method.		
Biological Activity:	No kinase activity		
Predicted N-terminal:	Met		

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial. **DO NOT VORTEX.** Allow several minutes for complete reconstitution.

Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C. After reconstitution, store working aliquots at -20°C to -80°C. **Avoid repeated freeze-thaw cycles.**

SDS-PAGE



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