Anti-MK13 antibody

Description	Unconjugated Rabbit polyclonal to MK13

Model	STJ191719
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human MK13 protein.
Immunogen Region	200-280aa
Gene ID	5603
Gene Symbol	MAPK13
Dilution range	WB 1:500-2000 ELISA 1:5000-20000
Specificity	MK13 Polyclonal Antibody detects endogenous levels of protein.
Tissue Specificity	Expressed in testes, pancreas, small intestine, lung and kidney. Abundant in macrophages, also present in neutrophils, CD4+ T-cells, and endothelial cells.
Purification	MK13 antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Mitogen-activated protein kinase 13 MAP kinase 13 MAPK 13 Mitogen-activated protein kinase p38 delta MAP kinase p38 delta Stress-activated protein kinase 4
Molecular Weight	40 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol,and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:6875OMIM:602899
Alternative Names	Mitogen-activated protein kinase 13 MAP kinase 13 MAPK 13 Mitogen-activated protein kinase p38 delta MAP kinase p38 delta Stress-activated protein kinase 4
Function	Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. MAPK13 is one of the four p38 MAPKs which play an important role in the cascades of cellular responses evoked by extracellular stimuli such as proinflammatory cytokines or physical stress leading to direct activation of transcription factors such as ELK1 and ATF2. Accordingly, p38 MAPKs phosphorylate a broad range of proteins and it has been estimated that they may have approximately 200 to 300 substrates each. MAPK13 is one of the less studied p38 MAPK isoforms. Some of the targets are downstream kinases such as MAPKAPK2, which are activated through phosphorylation and further phosphorylate additional targets. Plays a role in the regulation of protein translation by phosphorylating and inactivating EEF2K. Involved in cytoskeletal remodeling through phosphorylation of MAPT and STMN1. Mediates UV irradiation induced up-regulation of the gene expression of CXCL14. Plays an important role in the regulation of epidermal keratinocyte differentiation, apoptosis and skin tumor development. Phosphorylates the transcriptional activator MYB in response to stress which leads to rapid MYB degradation via a proteasome-dependent pathway. MAPK13 also phosphorylates and down-regulates PRKD1 during regulation of insulin secretion in pancreatic beta cells.
Sequence and Domain Family	The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases.
Post-translational Modifications	Dually phosphorylated on Thr-180 and Tyr-182 by MAP2K3/MKK3, MAP2K4/MKK4, MAP2K6/MKK6 and MAP2K7/MKK7, which activates the enzyme. Dephosphorylated by dual specificity phosphatase DUSP1.