

Recombinant Human Mitogen-activated protein kinase 13(MAPK13)

Catalog No: #AP70526

Package Size: #AP70526-1 20ug #AP70526-2 100ug #AP70526-3 1mg

Description

Product Name	Recombinant Human Mitogen-activated protein kinase 13(MAPK13)
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:1-365aaSequence Info:Full Length
Other Names	Mitogen-activated protein kinase p38 delta ;MAP kinase p38 delta;Stress-activated protein kinase 4
Accession No.	O15264
Calculated MW	58.1 kDa
Tag Info	N-terminal 6xHis-SUMO-tagged
Target Sequence	MSLIRKKGFYKQDVNKTAWELPKTYVSPTHVSGSGAYGSVCSAIDKRSGEKVAIKKLSRPFQSEIFAKRAYRELL LLKHMQHENVIGLLDVFTPASSLRNFYDFYLVMPFMQTDLQKIMGMEFSEEKIQYLVYQMLKGLKYIHSAGVVH RDLKPGNLAVNEDCELKILDFGLARHADAEMTGYYVTRWYRAPEVILSWMHYNQTVDIWSVGCIMAEMLTGK TLFKGKDYLDQLTQILKVTGVPGTEFVQKLNDKAAKSYIQSLPQTTPRKDFTQLFPRASPQAADLLEKMLELDVD KRLTAAQALTHPFFEPFRDPEEETEAQQPFDDSLHEKLTVDDEWKQHIYKEIVNFSPIARKDSRRRSGMKL
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

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 domain 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

References

"Mechanisms and functions of p38 MAPK signalling."Cuadrado A., Nebreda A.R.Biochem. J. 429:403-417(2010)Research Topic:Cell Biology

Note: This product is for in vitro research use only and is not intended for use in humans or animals.