Datasheet for ABIN3093874

MAPK13 Protein (AA 1-365) (Strep Tag)

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Overview

Quantity:	1 mg
Target:	MAPK13
Protein Characteristics:	AA 1-365
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MAPK13 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

Product Details

Sequence:	MSLIRKKGFY KQDVNKTAWE LPKTYVSPTH VGSGAYGSVC SAIDKRSGEK VAIKKLSRPF QSEIFAKRAY RELLLLKHMQ HENVIGLLDV FTPASSLRNF YDFYLVMPFM QTDLQKIMGM EFSEEKIQYL VYQMLKGLKY IHSAGVVHRD LKPGNLAVNE DCELKILDFG LARHADAEMT GYVVTRWYRA PEVILSWMHY NQTVDIWSVG CIMAEMLTGK TLFKGKDYLD QLTQILKVTG VPGTEFVQKL NDKAAKSYIQ SLPQTPRKDF TQLFPRASPQ AADLLEKMLE LDVDKRLTAA QALTHPFFEP FRDPEEETEA QQPFDDSLEH EKLTVDEWKQ HIYKEIVNFS PIARKDSRRR SGMKL **Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Characteristics:	Key Benefits: • Made in Germany - from design to production - by highly experienced protein experts. • Protein expressed with ALiCE® and purified in one-step affinity chromatography

Product Details

- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a **made-to-order protein** and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

The big advantage of ordering our **made-to-order proteins** in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Target Details

Target:	MAPK13
Alternative Name:	MAPK13 (MAPK13 Products)
Background:	Mitogen-activated protein kinase 13 (MAP kinase 13) (MAPK 13) (EC 2.7.11.24) (Mitogen-

Target Details

	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 pro-inflammatory 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. {ECO:0000269|PubMed:11500363, ECO:0000269|PubMed:11943212, ECO:0000269|PubMed:15632108, ECO:0000269|PubMed:17256148, ECO:0000269|PubMed:18006338, ECO:0000269|PubMed:18367666, ECO:0000269|PubMed:20478268, ECO:0000269|PubMed:9731215}.
Molecular Weight:	42.1 kDa
UniProt:	O15264
Pathways:	MAPK Signaling, Neurotrophin Signaling Pathway, Hepatitis C, BCR Signaling, S100 Proteins

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the

Application Details

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Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)