

Datasheet for ABIN3134628

## MAP4K1 Protein (AA 1-827) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	MAP4K1
Protein Characteristics:	AA 1-827
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MAP4K1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Brand:	AliCE®
Sequence:	<p>MALVDPDIFN KDPREHYDLL QRLGGGTYGE VFKARDKVSK DLVALKMKVKM EPDDDVATLQ</p> <p>KEILMLKTCR HANIVAYHGS YLWLQKLWIC MEFCGAGSLQ DIYQVTGSLS ELQISYVCRE</p> <p>VLQGLAYLHS EKKIHRDIKG ANILINDCGE VKLADFGISA QIGATLARRL SFIGTPYWMA</p> <p>PEVAVALKG GYNELCDIWS LGITAIELAE LQPPLFDVHP LRVFLMTKS GYQPPRLKEK</p> <p>SRWSSSFHNF VKVTLTKNSK KRPSATKMLS HQLVSQPGLN RGLILDLLDK MKNPGKGLPV</p> <p>DIEDEEPEPP PAIPRRIRST YRASSLGIPD ADCCRRQMEF QRPRCVD CRP QAETVRLYPP</p> <p>AHFGSTSPRS QLSDSDDDYD DVDIPAPSEN IPPPLPPKPK FRSPSDDGSG GIRDDGQLSP</p> <p>GVLVRCASGP PPRTPRPGPP PATCSPHLTA RSDPSLWNPA APEPGQPPLV PPRKEKMRGK</p> <p>MENEKRREKY PLLVKLFNGC PLQIHSTAAW THPSTKDQNL LLGAEEGIFI LNRNDQEATL</p> <p>EMIFPGRTTW LYCINNLLMS LSGKTPYLYS HSILGLLERK DGRTGSPIAH ISPHRLARK</p> <p>NMVSSKIQDT KGCRACCVAE SASSGGPFLC GALETSSVLL QWYQPMNKFL LVRQVLFPLP</p>

TPLPVFTLLT TPGSELPVC IGVSPGQAAK SVLFHTVRFG ALSCWLDDSS TEHKGPVQVI  
QVKEDMVMVL MDGSLKLVTP EGAPAPGLRT PEIPMTEAVE AVAMVEDRLE AFWKHGVQVW  
APGLKQPLQE LRDPTLTFR LCSRPRVVE TRPTDDPTAP SNLYIQE

**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
- 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

## Product Details

System (ALiCE®).

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

## Target Details

Target: MAP4K1

Alternative Name: Map4k1 ([MAP4K1 Products](#))

Background: Mitogen-activated protein kinase kinase kinase kinase 1 (EC 2.7.11.1) (Hematopoietic progenitor kinase) (HPK) (MAPK/ERK kinase kinase kinase 1) (MEK kinase kinase 1) (MEKKK 1),FUNCTION: Serine/threonine-protein kinase, which may play a role in the response to environmental stress (By similarity). Appears to act upstream of the JUN N-terminal pathway (PubMed:9003777). May play a role in hematopoietic lineage decisions and growth regulation (PubMed:9003777). Able to autophosphorylate (PubMed:9003777). Together with CLNK, it enhances CD3-triggered activation of T-cells and subsequent IL2 production (PubMed:11509653). {ECO:0000250|UniProtKB:Q92918, ECO:0000269|PubMed:11509653, ECO:0000269|PubMed:9003777}.

Molecular Weight: 91.5 kDa

UniProt: [P70218](#)

Pathways: [TCR Signaling](#), [Signaling of Hepatocyte Growth Factor Receptor](#)

## 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.

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## Application Details

	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!
Restrictions:	For Research Use only

## Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months