

# Datasheet for ABIN3093824

# MAP4K6 Protein (AA 1-1332) (Strep Tag)



## Overview

Quantity:	250 μg
Target:	MAP4K6 (MINK1)
Protein Characteristics:	AA 1-1332
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MAP4K6 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details	
Brand:	AliCE®
Sequence:	MGDPAPARSL DDIDLSALRD PAGIFELVEV VGNGTYGQVY KGRHVKTGQL AAIKVMDVTE
	DEEEEIKQEI NMLKKYSHHR NIATYYGAFI KKSPPGNDDQ LWLVMEFCGA GSVTDLVKNT
	KGNALKEDCI AYICREILRG LAHLHAHKVI HRDIKGQNVL LTENAEVKLV DFGVSAQLDR
	TVGRRNTFIG TPYWMAPEVI ACDENPDATY DYRSDIWSLG ITAIEMAEGA PPLCDMHPMR
	ALFLIPRNPP PRLKSKKWSK KFIDFIDTCL IKTYLSRPPT EQLLKFPFIR DQPTERQVRI
	QLKDHIDRSR KKRGEKEETE YEYSGSEEED DSHGEEGEPS SIMNVPGEST LRREFLRLQQ
	ENKSNSEALK QQQQLQQQQQ RDPEAHIKHL LHQRQRRIEE QKEERRRVEE QQRREREQRK
	LQEKEQQRRL EDMQALRREE ERRQAEREQE YKRKQLEEQR QSERLQRQLQ QEHAYLKSLQ
	QQQQQQLQK QQQQLLPGD RKPLYHYGRG MNPADKPAWA REVEERTRMN KQQNSPLAKS
	KPGSTGPEPP IPQASPGPPG PLSQTPPMQR PVEPQEGPHK SLVAHRVPLK PYAAPVPRSQ
	SLQDQPTRNL AAFPASHDPD PAIPAPTATP SARGAVIRQN SDPTSEGPGP SPNPPAWVRP

DNEAPPKVPQ RTSSIATALN TSGAGGSRPA QAVRARPRSN SAWQIYLQRR AERGTPKPPG
PPAQPPGPPN ASSNPDLRRS DPGWERSDSV LPASHGHLPQ AGSLERNRVG VSSKPDSSPV
LSPGNKAKPD DHRSRPGRPA DFVLLKERTL DEAPRPPKKA MDYSSSSEEV ESSEDDEEEG
EGGPAEGSRD TPGGRSDGDT DSVSTMVVHD VEEITGTQPP YGGGTMVVQR TPEEERNLLH
ADSNGYTNLP DVVQPSHSPT ENSKGQSPPS KDGSGDYQSR GLVKAPGKSS FTMFVDLGIY
QPGGSGDSIP ITALVGGEGT RLDQLQYDVR KGSVVNVNPT NTRAHSETPE IRKYKKRFNS
EILCAALWGV NLLVGTENGL MLLDRSGQGK VYGLIGRRRF QQMDVLEGLN LLITISGKRN
KLRVYYLSWL RNKILHNDPE VEKKQGWTTV GDMEGCGHYR VVKYERIKFL VIALKSSVEV
YAWAPKPYHK FMAFKSFADL PHRPLLVDLT VEEGQRLKVI YGSSAGFHAV DVDSGNSYDI
YIPVHIQSQI TPHAIIFLPN TDGMEMLLCY EDEGVYVNTY GRIIKDVVLQ WGEMPTSVAY
ICSNQIMGWG EKAIEIRSVE TGHLDGVFMH KRAQRLKFLC ERNDKVFFAS VRSGGSSQVY
FMTLNRNCIM NW

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

## **Target Details**

Target:	MAP4K6 (MINK1)
Alternative Name:	MINK1 (MINK1 Products)
Background:	Misshapen-like kinase 1 (EC 2.7.11.1) (GCK family kinase MiNK) (MAPK/ERK kinase kinase
	kinase 6) (MEK kinase kinase 6) (MEKKK 6) (Misshapen/NIK-related kinase) (Mitogen-activated
	protein kinase kinase kinase kinase 6),FUNCTION: Serine/threonine kinase which acts as a
	negative regulator of Ras-related Rap2-mediated signal transduction to control neuronal
	structure and AMPA receptor trafficking. Required for normal synaptic density, dendrite
	complexity, as well as surface AMPA receptor expression in hippocampal neurons. Can activate
	the JNK and MAPK14/p38 pathways and mediates stimulation of the stress-activated protein
	kinase MAPK14/p38 MAPK downstream of the Raf/ERK pathway. Phosphorylates: TANC1
	upon stimulation by RAP2A, MBP and SMAD1. Has an essential function in negative selection
	of thymocytes, perhaps by coupling NCK1 to activation of JNK1., FUNCTION: Isoform 4 can
	activate the JNK pathway. Involved in the regulation of actin cytoskeleton reorganization, cell-
	matrix adhesion, cell-cell adhesion and cell migration.
Molecular Weight:	149.8 kDa
UniProt:	Q8N4C8
Pathways:	Synaptic Membrane

# **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 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!
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