

Datasheet for ABIN3093636

**MAP3K8 Protein (AA 1-467) (Strep Tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	1 mg
Target:	MAP3K8
Protein Characteristics:	AA 1-467
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MAP3K8 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

## Product Details

Sequence:	MEYMSTGSDN KEEIDLLIKH LNVSDVIDIM ENLYASEEPA VYEPSLMTMC QDSNQNDERS KSLLLSGQEV PWLSSVRYGT VEDLLAFANH ISNTAKHFGY QRPQESGILL NMVITPQNGR YQIDSDVLLI PWKLTYNIG SDFIPRGAFG KVYLAQDIKT KKRMAACKLIP VDQFKPSDVE IQACFRHENI AELYGAVLWG ETVHLFMEAG EGGSVLEKLE SCGPMREFEI IWVTKHVLKG LDFLHSHKKVI HHDIKPSNIV FMSTKAVLVD FGLSVQMTED VYFPKDLRGT EIYMSPEVIL CRGHSTKADI YSLGATLIHM QTGTTPWVKR YPRSAYPSYL YIIHKQAPPL EDIADDCSPG MRELIEASLE RNPNHRPRAA DLLKHEALNP PREDQPRCQS LDSALLERKR LLSRKELELP ENIADSSCTG STEESEMLKR QRSLYIDLGA LAGYFNLVRG PPTLEYG  <b>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.</b>
-----------	--

Characteristics:	Key Benefits:
------------------	---------------

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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 in several dilutions and is measured against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

---

### Purification:

Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®):

1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

## Product Details

Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

## Target Details

Target:	MAP3K8
Alternative Name:	MAP3K8 ( <a href="#">MAP3K8 Products</a> )
Background:	<p>Mitogen-activated protein kinase kinase kinase 8 (EC 2.7.11.25) (Cancer Osaka thyroid oncogene) (Proto-oncogene c-Cot) (Serine/threonine-protein kinase cot) (Tumor progression locus 2) (TPL-2),FUNCTION: Required for lipopolysaccharide (LPS)-induced, TLR4-mediated activation of the MAPK/ERK pathway in macrophages, thus being critical for production of the pro-inflammatory cytokine TNF-alpha (TNF) during immune responses. Involved in the regulation of T-helper cell differentiation and IFNG expression in T-cells. Involved in mediating host resistance to bacterial infection through negative regulation of type I interferon (IFN) production. In vitro, activates MAPK/ERK pathway in response to IL1 in an IRAK1-independent manner, leading to up-regulation of IL8 and CCL4. Transduces CD40 and TNFRSF1A signals that activate ERK in B-cells and macrophages, and thus may play a role in the regulation of immunoglobulin production. May also play a role in the transduction of TNF signals that activate JNK and NF-kappa-B in some cell types. In adipocytes, activates MAPK/ERK pathway in an IKBKB-dependent manner in response to IL1B and TNF, but not insulin, leading to induction of lipolysis. Plays a role in the cell cycle. Isoform 1 shows some transforming activity, although it is much weaker than that of the activated oncogenic variant.</p> <p>{ECO:0000269 PubMed:11342626, ECO:0000269 PubMed:12667451, ECO:0000269 PubMed:15169888, ECO:0000269 PubMed:16371247, ECO:0000269 PubMed:1833717, ECO:0000269 PubMed:19001140, ECO:0000269 PubMed:19808894}.</p>
Molecular Weight:	52.9 kDa
UniProt:	<a href="#">P41279</a>
Pathways:	<a href="#">PI3K-Akt Signaling</a> , <a href="#">TCR Signaling</a>

## Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies
--------------------	---

## Application Details

---

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. 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)



**Image 1.** „Crystallography Grade“ protein due to multi-step, protein-specific purification process