

# Recombinant human MAPKAPK3 protein

Catalog Number: ATGP1805

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-382aa

### UniProt No.

Q16644

### NCBI Accession No.

NP\_004626

### Alternative Names

MAP kinase-activated protein kinase 3, 3PK, MAPKAP-K3, MAPKAP3, MAPKAPK-3, MK-3

## PRODUCT SPECIFICATION

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### Molecular Weight

45.4 kDa (405aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.2M NaCl, 20% glycerol, 1mM DTT

### Purity

> 95% by SDS-PAGE

### Tag

His-Tag

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

MAP kinase-activated protein kinase 3, also known as MAPKAPK3, is involved in inflammatory response by regulating tumor necrosis factor (TNF) and IL6 production post-transcriptionally: acts by phosphorylating Au-rich elements (AREs) -binding proteins, such as TTP/ZFP36, leading to regulate the stability and translation of TNF and IL6 mRNAs. Phosphorylation of TTP/ZFP36, a major post-transcriptional regulator of TNF, promotes its binding to 14-3-3 proteins and reduces its ARE mRNA affinity leading to inhibition of dependent degradation of ARE-containing transcript. Recombinant human MAPKAPK3 protein, fused to His-tag at N-terminus, was

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expressed in *E. coli* and purified by using conventional chromatography techniques.

## Amino acid Sequence

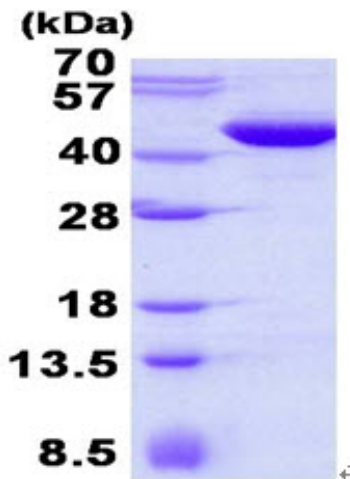
MGSSHHHHHH SSSLVPRGSH MGSMDGETAE EQGGPVPPPV APGGPGLGGA PGGRRPEPKY AVTDDYQLSK  
QVLGLGVNGK VLECFHRRTG QKCALKLLYD SPKARQEVHD HWQASGGPHI VCILDVYENM HHGKRCLLII MECMEGGELF  
SRIQERGDQA FTREAAEIM RDIGTAIQFL HSHNIAHRDV KPENLLYTSK EKDAVLKLD FGFAKETTQN ALQTPCYTPY  
YVAPEVLGPE KYDKSCDMWS LGVIMYILLC GFPPFYSNTG QAISPGMKRR IRLGQYGFPN PEWSEVEDA KQLIRLLLKT  
DPTERTITQ FMNHPWINQS MVVPQTPLHT ARVLQEDKDH WDEVKEEMTS ALATMRVDYD QVKIKDLKTS NNRLLNKRRK  
KQAGSSASQ GCNNQ

## General References

Voncken J.W., et al. (2005) *J. Biol. Chem.* 280:5178-5187  
Mendoza H., et al. (2008) *Biochem. J.* 409:711-722

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)