

# Recombinant human p38 gamma/MAPK12 protein

Catalog Number: ATGP1313

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-367aa

### UniProt No.

P53778

### NCBI Accession No.

NP\_002960

### Alternative Names

Mitogen-activated protein kinase 12, ERK3, ERK6, P38GAMMA, PRKM12, SAPK-3, SAPK3

## PRODUCT SPECIFICATION

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### Molecular Weight

44.1 kDa (387aa) confirmed by MALDI-TOF

### Concentration

0.5mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol, 0.1M NaCl

### 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

Mitogen-activated protein kinase 12, also known as MAPK12, belongs to the MAP kinase family. MAPK12 functions as a signal transducer during differentiation of myoblasts to myotubes. Expressed in different areas throughout the body with common expression patterns in heart, p38 proteins use magnesium as a cofactor to catalyze the ATP-dependent phosphorylation of target proteins. Recombinant human MAPK12 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

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## Amino acid Sequence

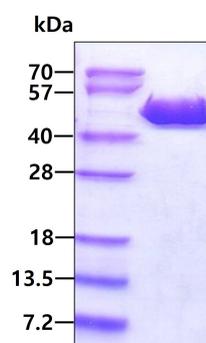
<MGSSHHHHHH SSGLVPRGSH> MSSPPPARSG FYRQEVTKTA WEVRAVYRDL QPVGSGAYGA VCSAVDGRTG  
AKVAIKKLYR PFQSEFAKR AYRELRLKHK MRHENVIGLL DVFTPDETLD DFTDFYLVMP FMGTDLGKLM KHEKLGEDRI  
QFLVYQMLKG LRYIHAAGII HRDLKPGNLA VNEDCELKIL DFGLARQADS EMTGYVVTRW YRAPEVILNW MRYTQTVDIW  
SVGCIMAEMI TGKTLFKGSD HLDQLKEIMK VTGTPPAEFV QRLQSDEAKN YMKGLPELEK KDFASILTNA SPLAVNLLEK  
MLVLDAEQRV TAGEALAHPY FESLHDEDE PQVQKYDDSF DDVDRTLDEW KRVTYKEVLS FKPPRQLGAR VSKETPL

## General References

Han J., et al. (1995) *Biochim Biophys Acta*. 1265:224-227.  
Court N W., et al. (2002) *J Mol Cell Cardiol*. 34:413-426.

## DATA

### SDS-PAGE



3 $\mu$ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.