Recombinant human ERK2/MAPK1 protein

Catalog Number: ATGP0445

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-360aa

UniProt No.
P28482

NCBI Accession No.
NP_620407

Alternative Names
PRKM2, PRKM1, p42MAPK, p41MAPK, p41, p40, p38, Mitogen-activated protein kinase 1 MAP kinase 2, Mitogen-activated protein kinase 1, MAPK2, MAPK1, Extracellular Signal Regulated Kinase 2, ERT1, ERK2, ERK, ,

PRODUCT SPECIFICATION

Molecular Weight
43.5 kDa (380aa) confirmed by MALDI-TOF

Concentration
1mg/ml (determined by Bradford assay)

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

Description
MAPK1, also known as ERK (extracellular signal-regulated kinase), acts as an integration point for multiple biochemical signals, and is involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. The activation of this kinase requires its phosphorylation by upstream kinases. upon activation, this kinase translocates to the nucleus of the stimulated cells, where it phosphorylates nuclear targets. Recombinant human MAPK1 protein, fused to His-tag at N-terminus, was expressed in E. coli and

purified by using conventional chromatography techniques.

Amino acid Sequence

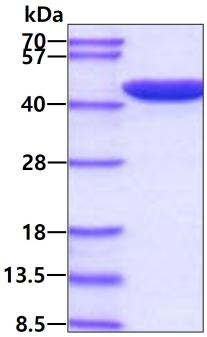
<MGSSHHHHHH SSGLVPRGSH> MAAAAAAGAG PEMVRGQVFD VGPRYTNLSY IGEGAYGMVC SAYDNVNKVR VAIKKISPFE HQTYCQRTLR EIKILLRFRH ENIIGINDII RAPTIEQMKD VYIVQDLMET DLYKLLKTQH LSNDHICYFL YQILRGLKYI HSANVLHRDL KPSNLLLNTT CDLKICDFGL ARVADPDHDH TGFLTEYVAT RWYRAPEIML NSKGYTKSID IWSVGCILAE MLSNRPIFPG KHYLDQLNHI LGILGSPSQE DLNCIINLKA RNYLLSLPHK NKVPWNRLFP NADSKALDLL DKMLTFNPHK RIEVEQALAH PYLEQYYDPS DEPIAEAPFK FDMELDDLPK EKLKELIFEE TARFQPGYRS

General References

Hu S., et al. (2009) Cell. 139(3):610-22.
McGargill MA., et al. (2009) J Immunol. 183(8):4838-42.

DATA

SDS-PAGE



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