

Recombinant human DUSP10 protein

Catalog Number: ATGP1392

PRODUCT INFORMATION

Expression system

E.coli

Domain

149-482aa

UniProt No.

Q9Y6W6

NCBI Accession No.

NP_009138

Alternative Names

Dual specificity protein phosphatase 10, MKP-5, MKP5, Mitogen-activated protein kinase phosphatase 5, MAP kinase phosphatase 5

PRODUCT SPECIFICATION

Molecular Weight

40.4 kDa (359aa) confirmed by MALDI-TOF

Concentration

0.25mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 2mM DTT, 50% glycerol, 200mM NaCl

Purity

> 90% by SDS-PAGE

Biological Activity

Specific activity is > 600unit/mg, and is defined as the amount of enzyme that hydrolyze 1.0nmole of p-nitrophenyl phosphate (pNPP) per minute at pH 7.5 at 37C.

Tag

His-Tag

Application

SDS-PAGE, Enzyme Activity

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

DuSP10 (Dual specificity protein phosphatase 10) belongs to the protein-tyrosine phosphatase family. Dual specificity protein phosphatases (DuSPs) inactivate their target kinases by dephosphorylating both the

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phosphoserine/threonine and phosphotyrosine residues. They negatively regulate members of the MAPK superfamily (MAPK/ERK, SAPK/JNK, p38), which is associated with cellular proliferation and differentiation. DuSP10 has been shown to interact with MAPK14 and MAPK8. When expressed in mammalian cells, DuSP10 blocks the enzymatic activation of MAP kinases with the selectivity p38 approximately JNK/SAPK >> ERK. Recombinant human DuSP10 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

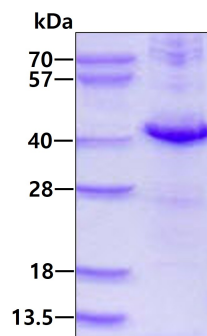
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RLQQGKITVL DLISCREGKD SFKRIFSKEI IVYDENTNEP SRVMPSQPLH IVLESLKREG KEPLVLKGGL SSFKQNHENL
CDNSLQLQEC REVGGGASAA SLLPQPIPT TPDINAELT PILPFLFLGN EQDAQDLDTM QRLNIGYVIN VTTHLPLYHY
EKGLFNYKRL PATDSNKQNL RQYFEEAFEF IEEAHQCGKG LLIHCQAGVS RSATIVIAYL MKHTRMTMTD AYKFVKGKRP
IISPNLNFMG QLLEFEEDLN NGVTPRILTP KLMGVETVV

General References

Theodosiou A, et al. (1999) *Oncogene*. 18(50):6981-8.
Jeong DG, et al. (2006) *J Mol Biol*. 360(5):946-55.

DATA

SDS-PAGE



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