PRODUCT INFORMATION

Expression system E.coli

Domain 1-190aa

UniProt No. Q9H596

NCBI Accession No. NP_071359

Alternative Names

Dual specificity protein phosphatase 21, Low molecular weight dual specificity phosphatase 21, LMW-DSP21

PRODUCT SPECIFICATION

Molecular Weight 24.1 kDa (214aa) 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, 20% glycerol, 200mM NaCl

Purity

> 90% 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

DuSP21 (Dual specificity protein phosphatase 21) belongs to the protein-tyrosine phosphatase family. Dual specificity protein phosphatases (DuSPs) inactivate their target kinases by dephosphorylating both the phosphoserine/threonine and phosphotyrosine residues. This enzyme can dephosphorylate single and diphosphorylated synthetic MAPK peptides, with preference for the phosphotyrosine and diphosphorylated forms over phosphothreonine. It is exclusively expressed in testis where is preferentially dephosphorylates phosphotyrosine residues. Recombinant human DuSP21 protein, fused to His-tag at N-



terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

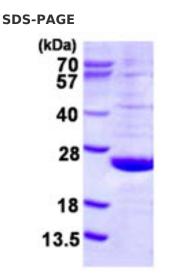
Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MGSHMTASAS SFSSSQGVQQ PSIYSFSQIT RSLFLSNGVA ANDKLLLSSN RITAIVNASV EVVNVFFEGI QYIKVPVTDA RDSRLYDFFD PIADLIHTID MRQGRTLLHC MAGVSRSASL CLAYLMKYHS MSLLDAHTWT KSRRPIIRPN NGFWEQLINY EFKLFNNNTV RMINSPVGNI PDIYEKDLRM MISM

General References

Hood, K.L., et al. (2002) Biochem. Biophys. Res. Commun. 298: 545-551. Keyse, S.M. (1995) Biochim. Biophys. Acta 1265: 152-160.

DATA



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

15% SDS-PAGE (3ug)