Recombinant human DUSP18 protein

Catalog Number: ATGP3562

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-188aa

UniProt No.
Q8NEJ0

NCBI Accession No.
NP_689724

Alternative Names
Dual specificity protein phosphatase 18, DSP18, DUSP20, Low molecular weight dual specificity phosphatase 20, LMW-DSP20, LMWDSP20

PRODUCT SPECIFICATION

Molecular Weight
23.6 kDa (212aa) 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, 40% glycerol, 0.1mM PMSF, 1mM EDTA

Purity
> 95% by SDS-PAGE

Biological Activity
Specific activity is > 300unit/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
Dual specificity phosphatase 18, also known as DUSP18, is a member of the dual-specificity phosphatase (DSP) family, which catalyzes dephosphorylation of phosphotyrosine and phosphothreonine residues. DUSP18 is

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inhibited by iodoarectic acid and is activated by manganese ions. Along with having preferential enzymatic activity against phosphorylated tyrosine residues over threonine residues, DUSP18 also dephosphorylates p-nitrophenyl phosphate (pNPP) in vitro. This protein is widely expressed with highest levels in liver, brain, ovary and testis. Recombinant human DUSP18 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

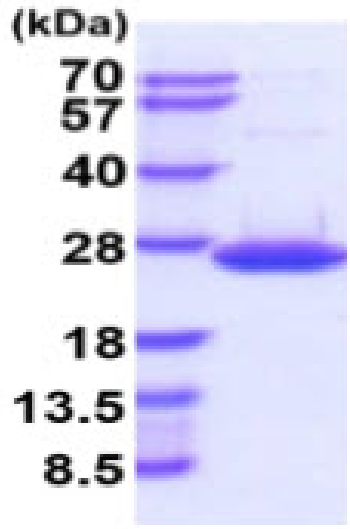
MGSSHHHHHH SSGLVPRGSH MGSHMTAPSC AFPVQFRQPS VSGLSQITKS LYISNGVAAN NKLMLSSNQI TMVINVSVEV VNTLYEDIQY MQVPVADSPN SRLCDFFDPI ADHIHSVEMK QGRTLLHCAA GVSRSAALCL AYLMKYHAMS LLDAHTWTKS CRPIIRPNSG FWEQLIHYEF QLFGKNTVHM VSSPVGMIPD IYEKEVRLMI PL

General References

Jeong D G., et al. (2006) Acta Crystallogr. 62:582-588.
Aoki N., et al. (2001) J Biochem. 130:133-140.

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

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