Recombinant human IMPAD1 protein

Catalog Number: ATGP2986

PRODUCT INFORMATION

Expression system
E.coli

Domain
34-359aa

UniProt No.
Q9NX62

NCBI Accession No.
NP_060283

Alternative Names
Inositol monophosphatase 3, GPAPP, IMP 3, IMP-3, IMPA3

PRODUCT SPECIFICATION

Molecular Weight
37.6 kDa (349aa) confirmed by MALDI-TOF

Concentration
0.25mg/ml (determined by Bradford assay)

Formulation
Liquid in. Phosphate-Buffered Saline (pH 7.4)

Purity
> 90% by SDS-PAGE

Biological Activity
Specific acitivty > 3300pmol/min/ug, its ability to dephosphorylate adenosine 3'5'-diphosphate sodium slat at pH 7.5, 25C.

Tag
His-Tag

Application
Enzyme Activity,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
IMPAD1, also known as Inositol monophosphatase 3, is a member of the inositol monophosphatase family. IMPAD1 is localized to the Golgi apparatus and catalyzes the hydrolysis of phosphoadenosine phosphate (PAP) to adenosine monophosphate (AMP). Mutations in this gene are a cause of GRAPP type chondrodysplasia with joint

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dislocations, and a pseudogene of this gene is located on the long arm of chromosome 1. Recombinant human IMPAD1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by conventional chromatography, after refolding of the isolated inclusion bodies in a renaturation buffer.

Amino acid Sequence

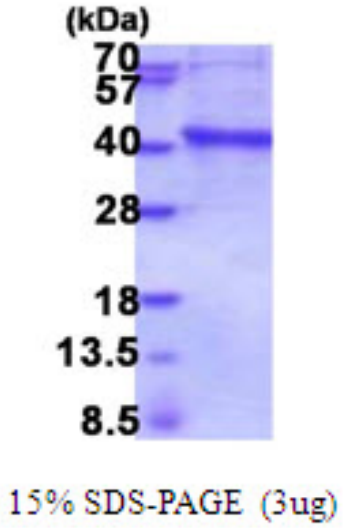
MGSSHHHHHH SSGLVPRGSH MGSGRFSLFG LGGEPGGGAA GPAAAADGGT VDLREMLAVS VLAAVRGGDE VRRVRESNVL HEKSKGKTRE GAEDKMTSGD VLSNRKMFYL LKTAFPSVQI NTEEHVDAAD QEVILWDHKI PEDILKEVTT PKEVPAESVT VWIDPLDATQ EYTEDLRKYV TTMVCVAVNG KPMLGVIHKP FSEYTAWAMV DGGSNVKARS SYNEKTPRIV VSRSHSGMVK QVALQTFGNQ TTIIPAGGAG YKVLALLDVP DKSQEKADLY IHVTYIKKWD ICAGNAILKA LGGHMTTLSG EEISYTGSDG IEGGLLASIR MNHQALVRKL PDLEKTGHK

General References

Vissers L E., et al. (2011) Am J Hum Genet. 88:608-615.
Kalujnaia S., et al. (2010) FASEB J. 24:3981-3991.

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

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