

Bifunctional phosphatase IMPL2, chloroplastic (IMPL2), Recombinant Protein

Cat RP05161

Size 0.02 mg (E-Coli)/ 0.02 mg (Yeast)/ 0.1 mg (E-Coli)/ 0.1 mg (Yeast)/ 0.02 mg (Baculovirus)/ 0.02 mg (Mammalian-Cell)/ 0.1 mg (Baculovirus)/ 1 mg (E-Coli)/ 1 mg (Yeast)/ 0.1 mg (Mammalian-Cell)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-Cell)

Species *Arabidopsis thaliana* (Mouse-ear cress)

Full Product Name

Recombinant *Arabidopsis thaliana* Bifunctional phosphatase IMPL2, chloroplastic (IMPL2)

Product Gene Name

IMPL2 recombinant protein

Product Synonym Gene Name

IMPL2

Purity

Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)

Sequence

ASNSKRPNIS NESPSELSDT ELDRAAAVGN ALADASGEVI RKYFRKKFDI VDKDDMSPVT IADQMAEEAM VSIIFQNLPS HAIYGEEKGW RKKEESADYV WVLDPIDGTK SFITGKPVFG TLIALYKGK PILGLIDQPI LKERWIGMNG RRTKLNGEDI STRSCPPLSQ AYLYTTSPHL FSEEEAKAYS RVRDKVKVPL YGCDCYAYAL LASGFVDLVI ESGLKPYDFL ALVPVIEGAG GTITDWTGKR FLWEASSSAV ATSFNVVAAG DSDIHQQALE SLEWH

Sequence Positions

62-346, Full length protein

Format

Lyophilized or liquid (Format to be determined during the manufacturing process)

Host

E Coli or Yeast or Baculovirus or Mammalian Cell

Molecular Weight

38,235 Da

Storage

Store at -20°C. For long-term storage, store at -20°C or -80°C. Store working aliquots at 4°C for up to one week. Repeated freezing and thawing is not recommended.

Protein Family

Neural/ectodermal development factor

NCBI Accession

NP_001320164.1

NCBI GI

1063719913

NCBI GenBank Nucleotide

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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NCBI GenelD NM_001342523.1
830067

NCBI Official Full Name

inositol monophosphatase family protein

NCBI Official Symbol

IMPL2

NCBI Official Synonym Symbols

HISN7; HISTIDINE BIOSYNTHESIS 7; myo-inositol monophosphatase like 2; T22F8.20; T22F8_20

NCBI Protein Information

inositol monophosphatase family protein

NCBI Summary

Encodes a chloroplast-localized member of the myo-inositol monophosphatase family, IMPL2 (myo-Inositol monophosphatase like 2) that seems to have multiple enzymatic activities. It contributes to histidine biosynthesis based on its histidinol-phosphate phosphatase activity. In addition, the protein can act as an inositol monophosphatase and an L-galactose-1-phosphate phosphatase in vitro.

UniProt Gene Name

HISN7

UniProt Synonym Gene Names

IMPL2; HPP

UniProt Protein Name

Bifunctional phosphatase IMPL2, chloroplastic

UniProt Synonym Protein Names

Histidinol-phosphatase; Histidinol-phosphate phosphatase (EC:3.1.3.15)

UniProt Primary Accession

Q6NPM8

UniProt Secondary Accession

Q67Y38; Q9T021; A0A1P8B6U8; F4JV95

UniProt Related Accession

Q6NPM8

UniProt Comments

Phosphatase required for histidine production. Acts also on L-galactose 1-phosphate (L-Gal 1-P), D-myoinositol 3-phosphate (D-Ins 3-P) and D-myoinositol 1-phosphate (D-Ins 1-P).

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