

Type I inositol 1,4,5-trisphosphate 5-phosphatase 2 (IP5P2), Recombinant Protein

Cat *RP05441*

Species

Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant *Arabidopsis thaliana* Type I inositol 1,4,5-trisphosphate 5-phosphatase 2 (IP5P2) , partial

Product Gene Name

IP5P2 recombinant protein

Product Synonym Gene Name

IP5P2

Purity

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

Format

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

Host

E Coli or Yeast or Baculovirus or Mammalian Cell

Molecular Weight

70,081 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

Type I inositol polyphosphate 5-phosphatase

NCBI Accession

NP_567547.1

NCBI GI

18415007

NCBI GenBank Nucleotide

NM_117911.4

NCBI GeneID

827526

NCBI Official Full Name

myo-inositol polyphosphate 5-phosphatase 2

NCBI Official Symbol

IP5PII

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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NCBI Official Synonym Symbols

4; 5)P3 5-PHOSPHATASE II; 5PTASE2; AT5PTASE2; INOSITOL POLYPHOSPHATE 5-PHOSPHATASE II; INOSITOL(1; myo-inositol polyphosphate 5-phosphatase 2; T6K21.190; T6K21_190

NCBI Protein Information

myo-inositol polyphosphate 5-phosphatase 2

NCBI Summary

Encodes an inositol polyphosphate 5-phosphatase that appears to have Type I activity. It can dephosphorylate IP3(inositol(1,4,5)P3) and IP4 (inositol(1,3,4,5)P4), but it does not appear to be active against phosphatidylinositol 4,5 biphosphate. Overexpression of this gene renders plants insensitive to ABA in germination and growth assays.

UniProt Gene Name

IP5P2

UniProt Synonym Gene Names

At5PTase2

UniProt Protein Name

Type I inositol polyphosphate 5-phosphatase 2

UniProt Primary Accession

Q9FUR2

UniProt Secondary Accession

O49700; Q9SNF1; Q9ZSC3

UniProt Related Accession

Q9FUR2

UniProt Comments

Has phosphatase activity toward Ins(1,4,5)P3 and Ins(1,3,4,5)P4. Seems to be involved in the abscisic acid (ABA) signaling pathway (PubMed:11340187). Could also be able to hydrolyze PtdIns(4,5)P2 and PtdIns(3,4,5)P3 (PubMed:23658066).

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