Recombinant Human MINPP1

Catalog No: C525

Description

Recombinant Human Multiple Inositol Polyphosphate Phosphatase 1 is produced by our Mammalian expression system and the target gene encoding Ser31-Leu487 is expressed with a 6His tag at the C-terminus.

Source

Human Cells

Alternative name

Multiple Inositol Polyphosphate Phosphatase 1; 2;3-Bisphosphoglycerate 3-Phosphatase; 2;3-BPG Phosphatase; Inositol (1;3;4;5)-Tetrakisphosphate 3-Phosphatase; Ins(1;3;4;5)P(4) 3-Phosphatase; MINPP1; MIPP

Accession No.

Q9UNW1

Formulation

Supplied as a 0.2 μm filtered solution of 20mM TrisHCl, 150mM NaCl, 10% Glycerol, pH 7.5.

Reconstitution

Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

It is not recommended to reconstitute to a concentration less than 100μg/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Quality Control

Purity: Greater than 95% as determined by reducing SDS-PAGE.
Endotoxin: Less than 0.1 ng/μg (1 IEU/μg) as determined by LAL test.

Shipping

The product is shipped at ambient temperature.
Upon receipt, store it immediately at the temperature listed below.

Storage

Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.
Reconstituted protein solution can be stored at 4-7°C for 2-7 days.
Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Amino Acid Sequence

SLLEPRDPVASSLSPYFGTKTRYEDVNPVLLSGPEAPWRDPELLEGTCTPVQLVALIRHGTRYPTVKQI
RKLRQLHGLLQARGSRD
GGASSTGSRDLGAALADWPLWYADWMDGQLVEKGRQDMRQLALRLASLFPALFSRENYGRLRLITS
SKHRCMDSSAAFLQG
LWQHYHPGLPPPDVADMEFGPPTVNDKLMRFFDHCEKFLTEVEKNATALYHVEAFKTGPEMQNILKK
VAATLQVPVNDLNA
DLIQVAFFTCSFDLAIKGVKSPWCDVFDIDDAKVLEYLNDLKQYWKRGYGYTINSRSSCTLFQDIFQHL
DKAVEQKQRSQPISSP
VILQFGHAETLLPLLSLMGYFKDKEPLTAYNYKKQMHRKFRSGLIVPYASNLIFVLYHCENAKTPKEQFR
VQMLLNEKVLPLAYS QETVSFYEDLKNHYKDILQSCQTSEECELARANSTSDELVDHHHHHH

Background

Multiple Inositol Polyphosphate Phosphatase 1/MINPP1 is an enzyme that removes 3-phosphate from inositol phosphate substrates. MINPP1 also converts 2,3 bisphosphoglycerate (2,3-BPG) to 2-phosphoglycerate. MINPP1 is synthesized as a 487 amino acid precursor that contains an 30 amino acid signal peptide and a 457 amino aicd mature chain. MINPP1 is widely expressed with the highest levels found in kidney, liver and placenta. It acts as a phosphoinositide 5- and phosphoinositide 6-phosphatase and regulates cellular levels of inositol pentakisphosphate (InsP5) and inositol hexakisphosphate (InsP6). MINPP1 may play a role in bone development (endochondral ossification).

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