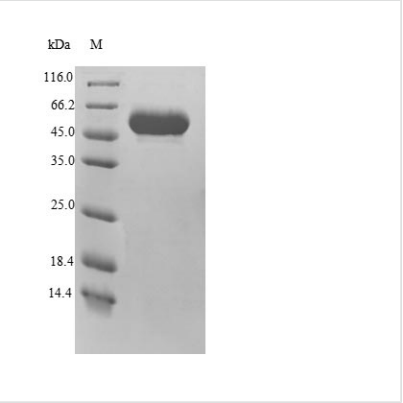
Recombinant human Multiple inositol polyphosphate phosphatase 1 (MINPP1)

Product Code	CSB-YP891977HU
Relevance	Acts as a phosphoinositide 5- and phosphoinositide 6-phosphatase and regulates cellular levels of inositol pentakisphosphate (InsP5) and inositol hexakisphosphate (InsP6). Also acts as a 2,3-bisphosphoglycerate 3-phosphatase, by mediating the dephosphorylation of 2,3-bisphosphoglycerate (2,3-BPG) to produce phospho-D-glycerate without formation of 3-phosphoglycerate. May play a role in bone development (endochondral ossification).
Abbreviation	Recombinant Human MINPP1 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q9UNW1
Alias	2,3-bisphosphoglycerate 3-phosphatase (EC:3.1.3.80) ;2,3-BPG phosphataseInositol (1,3,4,5)-tetrakisphosphate 3-phosphatase ;Ins(1,3,4,5)P(4) 3-phosphatase
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	SLLEPRDPVASSLSPYFGTKTRYEDVNPVLLSGPEAPWRDPELLEGTCTPVQL VALIRHGTRYPTVKQIRKLRQLHGLLQARGSRDGGASSTGSRDLGAALADWPL WYADWMDGQLVEKGRQDMRQLALRLASLFPALFSRENYGRLRLITSSKHRC MDSSAAFLQGLWQHYHPGLPPPDVADMEFGPPTVNDKLMRFFDHCEKFLTE VEKNATALYHVEAFKTGPEMQNILKKVAATLQVPVNDLNADLIQVAFFTCSFDL AIKGVKSPWCDVFDIDDAKVLEYLNDLKQYWKRGYGYTINSRSSCTLFQDIFQ HLDKAVEQKQRSQPISSPVILQFGHAETLLPLLSLMGYFKDKEPLTAYNYKKQM HRKFRSGLIVPYASNLIFVLYHCENAKTPKEQFRVQMLLNEKVLPLAYSQETVS FYEDLKNHYKDILQSCQTSEECELARANSTSDEL
Research Area	Signal Transduction
Source	Yeast
Target Names	MINPP1
Protein Names	Recommended name: Multiple inositol polyphosphate phosphatase 1 EC= 3.1.3.62 Alternative name(s): 2,3-bisphosphoglycerate 3-phosphatase Short name= 2,3-BPG phosphatase EC= 3.1.3.80 Inositol (1,3,4,5)-tetrakisphosphate 3-ph
Expression Region	31-487aa

Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	54.1kDa
Protein Length	Full Length of Mature Protein

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The expression region of this recombinant Human MINPP1 covers amino acids 31-487. The calculated molecular weight for this MINPP1 protein is 54.1 kDa. The MINPP1 protein was expressed in yeast. The MINPP1 gene fragment has been modified by fusing the N-terminal 6xHis tag, providing convenience in detecting and purifying the recombinant MINPP1 protein during the following stages.

Human multiple inositol polyphosphate phosphatase 1 (MINPP1) is a phosphatase enzyme that catalyzes the dephosphorylation of inositol polyphosphates, specifically targeting inositol hexakisphosphate (InsP6) and inositol pentakisphosphate (InsP5). MINPP1 is involved in the homeostasis of inositol polyphosphates, which are signaling molecules implicated in various cellular processes, including cell growth, vesicle trafficking, and ion channel regulation. Dysregulation of inositol polyphosphate metabolism, including alterations in MINPP1 activity, has been associated with certain diseases, including cancer and neurodegenerative disorders. Research on MINPP1 contributes to the understanding of inositol signaling pathways and their impact on cellular physiology.

Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.
Shelf Life	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.