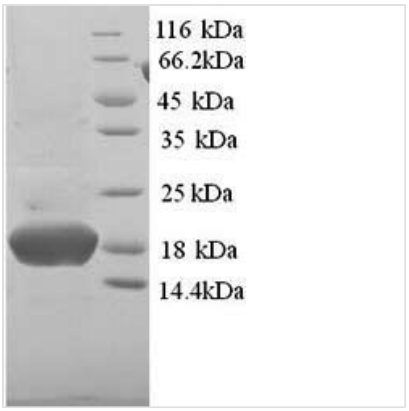
Recombinant Human 14 kDa phosphohistidine phosphatase (PHPT1)

Product Code	CSB-YP017942HU
Relevance	Exhibits phosphohistidine phosphatase activity.
Abbreviation	Recombinant Human PHPT1 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.	Q9NRX4
Alias	Phosphohistidine phosphatase 1;Protein janus-A homolog
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MAVADLALIPDVDIDSDGVFKYVLIRVHSAPRSGAPAAESKEIVRGYKWAEYHADIYDKVSGDMQKQGCDCECLGGGRISHQSQDKKIHVYGYSMAYGPAQHAISTEKIKAKYPDYEVTWANDGY
Research Area	Cell Biology
Source	Yeast
Target Names	PHPT1
Expression Region	1-125aa
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	15.8kDa
Protein Length	Full Length
Image	 (Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The recombinant Human PHPT1 was expressed with the amino acid range of 1-125. The calculated molecular weight for this PHPT1 protein is 15.8 kDa. Expression of this PHPT1 protein is conducted in yeast. The PHPT1 gene fragment has been modified by fusing the N-terminal 6xHis tag, providing convenience in detecting and purifying the recombinant PHPT1 protein during the following stages.

The human 14 kDa Phosphohistidine Phosphatase (PHPT1) plays a crucial role in cellular signaling by catalyzing the dephosphorylation of phosphohistidine residues. Histidine phosphorylation is a reversible post-translational modification involved in the regulation of various cellular processes, including signal transduction and metabolic pathways. PHPT1 specifically targets proteins containing phosphohistidine residues and hydrolyzes the phosphate group, thereby regulating the activity of these proteins. Its activity is essential for maintaining the dynamic balance of histidine phosphorylation in cells. Research on PHPT1 spans cell signaling, enzymology, and its potential implications in cellular homeostasis and disease. Understanding the precise regulatory mechanisms involving PHPT1 provides insights into the intricate network of cellular signaling pathways and their impact on cellular functions.

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

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