

Datasheet for ABIN7317373 **PHPT1 Protein (His tag)**



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Overview

Quantity:	100 µg
Target:	PHPT1
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PHPT1 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human PHPT1/PHP14 Protein (His Tag)
Sequence:	Ala 2-Tyr 125
Characteristics:	A DNA sequence encoding the human PHPT1 (Q9NRX4-1) (Ala 2-Tyr 125) was expressed, with a polyhistidine tag at the N-terminus.
Purity:	> 97 % as determined by reducing SDS-PAGE.

Target Details

Target:	PHPT1
Alternative Name:	PHPT1/PHP14 (PHPT1 Products)
Background:	<p>Background: PHPT1, also known as 14 kDa phosphohistidine phosphatase, phosphohistidine phosphatase 1, protein janus-A homolog, PHP14, is a cytoplasm protein which belongs to the janus family. PHPT1 / PHP14 is expressed abundantly in heart and skeletal muscle.</p> <p>Phosphatases are a diverse group of enzymes that regulate numerous cellular processes.</p>

Target Details

Much of what is known relates to the tyrosine, threonine, and serine phosphatases, whereas the histidine phosphatases have not been studied as much. Protein histidine phosphorylation exists widely in vertebrates, and it plays important roles in signal transduction and other cellular functions. Protein histidine phosphorylation accounts for about 6% of the total protein phosphorylation in eukaryotic cells. The knowledge about eukaryotic PHPT (protein histidine phosphatase) is still very limited. To date, only one vertebrate PHPT has been discovered, and two crystal structures of human PHPT1 have been solved. PHPT1 / PHP14 can dephosphorylate a variety of proteins (e.g. ATP-citrate lyase and the beta-subunit of G proteins). A putative active site has been identified by its electrostatic character, ion binding, and conserved protein residues.

Synonym: CGI-202;HEL-S-132P;HSPC141;PHP14

Molecular Weight: 15.2 kDa

Pathways: [Positive Regulation of Peptide Hormone Secretion](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile PBS, pH 7.4

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.