Recombinant Human PHPT1 / PHP14 Protein (His tag)

Cat.NO.: TP07727

3th Edition

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

Description: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. Phosphatases are a diverse group of enzymes that regulate numerous cellular processes. 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.

Form:PBS

Molecular Weight:15.2 kDa

Sequences: Ala 2-Tyr 125

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.