



Mouse Anti-Human PHPT1 monoclonal antibody, clone NN22 (CABT-ZB637)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	It reacts with Human PHPT1
Target	PHPT1
Immunogen	Recombinant Human PHPT1 Protein
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human
Clone	NN22
Purification	Protein A purified
Conjugate	Unconjugated
Applications	ELISA(cap) We recommend the following for sandwich ELISA (Capture - Detection): CABT-ZB637 - CABT-ZB983 This antibody will detect PHPT1 in antibody pair set. [ABPR-ZB216]
Preparation	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human PHPT1. The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
Format	Purified, Liquid
Concentration	Lot specific

Size	50 µL, 100 µL, 200 µL, 1 mL
Buffer	PBS
Preservative	None
Storage	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
Ship	Wet ice

BACKGROUND

Introduction	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.
Keywords	PHPT1; phosphohistidine phosphatase 1; 14 kDa phosphohistidine phosphatase; sex regulated protein janus a

GENE INFORMATION

Synonyms	PHPT1; phosphohistidine phosphatase 1; 14 kDa phosphohistidine phosphatase; sex regulated protein janus a; bA216L13.10; CGI 202; DKFZp564M173; HSPC141; phosphohistidine phosphatase 14kDa; PHP14; 1700008C22Rik; protein janus-A homolog; sex-regulated protein janus-a; CGI-202; RP11-216L13.10
Entrez Gene ID	29085
UniProt ID	Q9NRX4