

Datasheet for ABIN7195472
ENTPD5 Protein (His tag)[Go to Product page](#)

1 Image

Overview

Quantity:	50 µg
Target:	ENTPD5
Origin:	Mouse
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This ENTPD5 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Mouse ENTPD5 Protein (His Tag)(Active)
Sequence:	Thr19-Ser427
Characteristics:	A DNA sequence encoding the mouse ENTPD5 (Q9WUZ9) (Thr19-Ser427) was fused with a polyhistidine tag at the C-terminus.
Purity:	> 90 % as determined by SDS-PAGE
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.
Biological Activity Comment:	Measured by its ability to hydrolyze the 5'phosphate groups from the substrate guanosine 5'diphosphate (GDP). The specific activity is > 15000 pmols/min/µg.

Target Details

Target:	ENTPD5
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Target Details

Alternative Name: ENTPD5 ([ENTPD5 Products](#))

Background: Background: Ectonucleoside triphosphate diphosphohydrolase 5 (ENTPD5), also known as CD39 antigen-like 4, ER-UDPase, Guanosine-diphosphatase ENTPD5, Nucleoside diphosphatase Uridine-diphosphatase ENTPD5. This hydrolase is expressed in response to phosphoinositide 3-kinase (PI3K) signaling. Activation of PI3K results in FOXO phosphorylation by AKT1 and loss of ENTPD5 transcriptional repression. It is Up-regulated in PTEN-deficient cells. Uridine diphosphatase (UDPase) that promotes protein N-glycosylation and ATP level regulation. ENTPD5 promotes protein N-glycosylation and folding in the endoplasmic reticulum, as well as elevated ATP consumption in the cytosol via an ATP hydrolysis cycle. Together with CMPK1 and AK1, ENTPD5 constitutes an ATP hydrolysis cycle that converts ATP to AMP and results in a compensatory increase in aerobic glycolysis. ENTPD5 also hydrolyzes GDP and IDP but not any other nucleoside di-, mono- or triphosphates, nor thiamine pyrophosphate. This enzyme Plays a key role in the AKT1-PTEN signaling pathway by promoting glycolysis in proliferating cells in response to phosphoinositide 3-kinase (PI3K) signaling.

Synonym: AI196558, AI987697, Cd39l4, ER-UDPase, mNTPase, NTPDase-5, NTPDase5, Pcph

Molecular Weight: 46.6 kDa

UniProt: [Q9WUZ9](#)

Application Details

Restrictions: For Research Use only

Handling

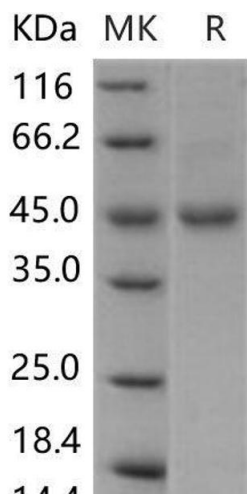
Format: Lyophilized

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

Buffer: Lyophilized from sterile 20 mM Tris, 500 mM NaCl, 3 mM DTT, 10 % glycerol, 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.



Western Blotting

Image 1.