

Datasheet for ABIN7505261

Pyrophosphatase (Inorganic) 1 (PPA1) (AA 2-289) protein (His tag)



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Overview

Quantity:	100 µg
Target:	Pyrophosphatase (Inorganic) 1 (PPA1)
Protein Characteristics:	AA 2-289
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	His tag

Product Details

Sequence:	Ser 2-Asn 289
Characteristics:	A DNA sequence encoding the Human PPA1 protein (Q15181) (Ser 2-Asn 289) was expressed with a N-His&C-His tag.
Purity:	> 95 % as determined by reducing SDS-PAGE.

Target Details

Target:	Pyrophosphatase (Inorganic) 1 (PPA1)
Alternative Name:	PPA1 (PPA1 Products)
Target Type:	Viral Protein
Background:	Abbreviation: PPA1 Target Synonym: Inorganic pyrophosphatase, PPA1, Pyrophosphate phospho-hydrolase (PPase) Background: PPA1 (Inorganic pyrophosphatase 1, also PPase and IOPPP) is a 32-36 kDa

Target Details

cytoplasmic member of the PPase family of enzymes. It is ubiquitously expressed, and acts on di- (or pyro) phosphate, generating orthophosphate in a Mg²⁺-dependent manner. This activity can both generate energy for cells, or in the case of osteoblasts, provide raw material for calcification. The consumption of pyrophosphate may also remove inhibitors of enzymes such as guanylyl cyclase, and PPA1 itself is also reported to stimulate gene expression. Human PPA1 is 289 amino acids (aa) in length. There is one pyrophosphatase domain between aa 42-255, and two utilized acetylation sites at Lys 57 and Lys228. PPA1 is known to form homodimers. There is one potential alternative start site at Met46. Full-length human PPA1 shares 94 % aa sequence identity with mouse PPA1.

Molecular Weight:	Calculated MW: 31.57 kDa Observed MW: 36 kDa
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UniProt:	Q15181
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Application Details

Restrictions:	For Research Use only
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Handling

Format:	Lyophilized
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Buffer:	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01 % Tween80 are added as protectants before lyophilization.
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Storage:	4 °C,-20 °C,-80 °C
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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.
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Expiry Date:	12 months
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