

Datasheet for ABIN3092415
ENPP1 Protein (AA 98-925) (His tag)



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Overview

Quantity:	1 mg
Target:	ENPP1
Protein Characteristics:	AA 98-925
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ENPP1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	KPSCAKEVKS CKGRCFERTF GNCRCDAACV ELGNCCLDYQ ETCIEPEHIW TCNKFRGCEK RLTRSLCACS DDCKDKGDCC INYSSVCQGE KSWVEEPCES INEQCPAGF ETPPTLLFSL DGFRAEYLHT WGGLLPVISK LKKCGTYTKN MRPVYPTKTF PNHYSIVTGL YPESHGIIDN KMYDPKMNAS FSLKSKEKFN PEWYKGEPW VTAKYQGLKS GTFFWPGSDV EINGIFPDIY KMYNGSVPFE ERILAVLQWL QLPKDERPHF YTLYLEEPDS SGHSYGPVSS EVIKALQRVD GMVGMLMDGL KELNLHRCLN LILSDHGME QGSCKKYIYL NKYLGDVKNI KVIYGPAARL RPSDVDPKYY SFNYEGIARN LSCREPNQHF KPYLKHFLPK RLHFAKSDRI EPLTFYLDPO WQLALNPSEK KYCGSGFHGS DNVFSNMQAL FVGYPGPFKH GIEADTFENI EVYNLMCDLL NLTPAPNNGT HGSLNHLLKN PVYTPKHPKE VHPLVQCPFT RNPRDNLGCS CNPSILPIED FQTQFNLTVA EEKIIKHETL PYGRPRVLQK ENTICLLSQH QFMSGYSQDI LMPLWTSYTV DRNDSFSTED FSNCLYQDFR IPLSPVHKCS FYKNNTKVSF GFLSPPQLNK NSSGIYSEAL LTTNIVPMYQ SFQVIWRYFH DTLLRKYAEE RGVNVVSGP VFDFDYDGRG DLENLRQKR
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RVIRNQEILI PTHFFIVLTS CKDTSQTPLH CENLDTLAFI LPHRTDNSES CVHGKHDSSW
VEELLMLHRA RITDVEHITG LSFYQQRKEP VSDILKLKTH LPTFSQED

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:	<ul style="list-style-type: none">• Made in Germany - from design to production - by highly experienced protein experts.• Human ENPP1 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.• State-of-the-art algorithm used for plasmid design (Gene synthesis). <p>This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.</p> <p>The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.</p> <p>In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).</p> <p>When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.</p> <p>The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.</p> <p>The concentration of the protein is calculated using its specific absorption coefficient. We use the ExPASy's protParam tool to determine the absorption coefficient of each protein.</p>
Purification:	<p>Two step purification of proteins expressed in baculovirus infected SF9 insect cells:</p> <ol style="list-style-type: none">1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.

Product Details

Grade: Crystallography grade

Target Details

Target: ENPP1

Alternative Name: ENPP1 ([ENPP1 Products](#))

Background: By generating PPi, plays a role in regulating pyrophosphate levels, and functions in bone mineralization and soft tissue calcification. PPi inhibits mineralization by binding to nascent hydroxyapatite (HA) crystals, thereby preventing further growth of these crystals. Preferentially hydrolyzes ATP, but can also hydrolyze other nucleoside 5' triphosphates such as GTP, CTP, TTP and UTP to their corresponding monophosphates with release of pyrophosphate and diadenosine polyphosphates, and also 3',5'-cAMP to AMP. May also be involved in the regulation of the availability of nucleotide sugars in the endoplasmic reticulum and Golgi, and the regulation of purinergic signaling. Appears to modulate insulin sensitivity and function. {ECO:0000269|PubMed:10615944, ECO:0000269|PubMed:8001561}.

Molecular Weight: 96.1 kDa Including tag.

UniProt: [P22413](#)

Pathways: [Regulation of Carbohydrate Metabolic Process](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: 100 mM NaCl, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.

Handling

Handling Advice:	Avoid repeated freeze-thaw cycles.
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Storage:	-80 °C
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Storage Comment:	Store at -80°C.
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Expiry Date:	Unlimited (if stored properly)
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