Datasheet for ABIN3093552

LONP1 Protein (AA 68-959) (His tag)

1 Image

Go to Product page

Overview

Quantity:	1 mg
Target:	LONP1
Protein Characteristics:	AA 68-959
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This LONP1 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	FWEASSRGGG AFSGGEDASE GGAEEGAGGA GGSAGAGEGP VITALTPMTI PDVFPHLPLI AITRNPVFPR FIKIIEVKNK KLVELLRRKV RLAQPYVGVF LKRDDSNESD VVESLDEIYH TGTFAQIHEM QDLGDKLRMI VMGHRRVHIS RQLEVEPEEP EAENKHKPRR KSKRGKKEAE DELSARHPAE LAMEPTPELP AEVLMVEVEN VVHEDFQVTE EVKALTAEIV KTIRDIIALN PLYRESVLQM MQAGQRVVDN PIYLSDMGAA LTGAESHELQ DVLEETNIPK RLYKALSLLK KEFELSKLQQ RLGREVEEKI KQTHRKYLLQ EQLKIIKKEL GLEKDDKDAI EEKFRERLKE LVVPKHVMDV VDEELSKLGL LDNHSSEFNV TRNYLDWLTS IPWGKYSNEN LDLARAQAVL EEDHYGMEDV KKRILEFIAV SQLRGSTQGK ILCFYGPPGV GKTSIARSIA RALNREYFRF SVGGMTDVAE IKGHRRTYVG AMPGKIIQCL KKTKTENPLI LIDEVDKIGR GYQGDPSSAL LELLDPEQNA NFLDHYLDVP VDLSKVLFIC TANVTDTIPE PLRDRMEMIN VSGYVAQEKL AIAERYLVPQ ARALCGLDES KAKLSSDVLT LLIKQYCRES GVRNLQKQVE KVLRKSAYKI VSGEAESVEV TPENLQDFVG KPVFTVERMY DVTPPGVVMG LAWTAMGGST LFVETSLRRP

Product Details

	QDKDAKGDKD GSLEVTGQLG EVMKESARIA YTFARAFLMQ HAPANDYLVT SHIHLHVPEG ATPKDGPSAG CTIVTALLSL AMGRPVRQNL AMTGEVSLTG KILPVGGIKE KTIAAKRAGV TCIVLPAENK KDFYDLAAFI TEGLEVHFVE HYREIFDIAF PDEQAEALAV ER **Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**
Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Human LONP1 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). 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. 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. 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). When you order this made-to-order protein you will only pay upon receival 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. 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. 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.
Purification:	Two step purification of proteins expressed in baculovirus infected SF9 insect cells: 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

Product Details

Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	LONP1
Alternative Name:	LONP1 (LONP1 Products)
Background:	ATP-dependent serine protease that mediates the selective degradation of misfolded, unassembled or oxidatively damaged polypeptides as well as certain short-lived regulatory proteins in the mitochondrial matrix. May also have a chaperone function in the assembly of inner membrane protein complexes. Participates in the regulation of mitochondrial gene expression and in the maintenance of the integrity of the mitochondrial genome. Binds to mitochondrial promoters and RNA in a single-stranded, site-specific, and strand-specific manner. May regulate mitochondrial DNA replication and/or gene expression using site-specific, single-stranded DNA binding to target the degradation of regulatory proteins binding to adjacent sites in mitochondrial promoters. Endogenous substrates include mitochondrial steroidogenic acute regulatory (StAR) protein. {ECO:0000255|HAMAP-Rule:MF_03120, ECO:0000269|PubMed:12198491, ECO:0000269|PubMed:15870080, ECO:0000269|PubMed:17420247, ECO:0000269|PubMed:8248235}.
Molecular Weight:	100.3 kDa Including tag.
UniProt:	P36776

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

Images

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process