

Datasheet for ABIN3137472

Myosin IC Protein (MYO1C) (AA 1-1063) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	Myosin IC (MYO1C)
Protein Characteristics:	AA 1-1063
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Myosin IC protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	<p>MALQVELIPT GEIIRVVHPH RPCKLALGSD GVRVTMESAL TARDRVGVQD FVLLENFTSE</p> <p>AAFIENLRRR FRENLIYTYI GPVLVSVNPY RDLQIYSRQH MERYRGVSFY EVPPHLFAVA</p> <p>DTVYRALRTE RRDQAVMISG ESGAGKTEAT KRLLQFYAET CPAPERGGAV RDRLLQSNPV</p> <p>LEAFGNAKTL RNDNSSRFGK YMDVQFDFKG APVGGHILSY LLEKSRVVHQ NHGERNFHVF</p> <p>YQLLEGEEEE TLRRGLERN PQSYLYLVKG QCAKVSSIND KSDWKVMRKA LSVIDFTEDE</p> <p>VEDLLSIVAS VLHLGNIHFA ADEDSNAQVT TENQLKYLTR LLGVEGTTLR EALTHRKIIA</p> <p>KGEELLSPLN LEQAAYARDA LAKAVYSRTF TWLVRKINRS LASKDAESPS WRSTTVLGLL</p> <p>DIYGFEVFQH NSFQFCINY CNEKLQQLFI ELTLKSEQEE YEAEGIAWEP VQYFNKIIC</p> <p>DLVEEKFKGI ISILDEECLR PGEATDLTFL EKLEDTVKPH PHFLTHKLAD QKTRKSLDRG</p> <p>EFRLHYAGE VTYSVTGFLD KNNDLLFRNL KETMCSSMNP IMAQCFDKSE LSDKKRPETV</p> <p>ATQFKMSLLQ LVEILRSKEP AYIRCIKPNP AKQPGRFDEV LIRHQVKYLG LMENLRVRRR</p> <p>GFAYRRKYEAF LQRYKSLCP ETWPMWAGRP QDGVAVLVRH LGYKPPEEYKM GRTKIFIRFP</p>
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KTLFATEDSL EVRRQSLATK IQAAWRGFHW RQKFLRVKRS AICIQSWWRG TLGRRKAAKR
KWAAQTIRRL IRGFILRHSP RCPENAFFLD HVRASFLLNL RRQLPRNVLD TSWPTPPPAL
REASELLREL CMKNMVWKYC RSISPEWKQQ LQKAVASEI FKGKKNYPQ SVPRLFISTR
LGTEEISPRV LQSLGSEPIQ YAVPVVKYDR KGYKPRPRQL LLTPSAVVIV EDAKVKQRID
YANLTGISVS SLSDSLFVLH VQREDNKQKG DVVLQSDHVI ETLTKTALSA DRVNNININQ
GSITFAGGPG RDGIIDFTSG SELLITKAKN GHLAVVAPRL NSR

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.
- Mouse Myo1c 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 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.

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.

Product Details

Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	Myosin IC (MYO1C)
Alternative Name:	Myo1c (MYO1C Products)
Background:	<p>Myosins are actin-based motor molecules with ATPase activity. Unconventional myosins serve in intracellular movements. Their highly divergent tails bind to membranous compartments, which then are moved relative to actin filaments. Involved in glucose transporter recycling in response to insulin by regulating movement of intracellular GLUT4-containing vesicles to the plasma membrane. Component of the hair cell's (the sensory cells of the inner ear) adaptation-motor complex. Acts as a mediator of adaptation of mechanoelectrical transduction in stereocilia of vestibular hair cells. Binds phosphoinositides and links the actin cytoskeleton to cellular membranes. {ECO:0000269 PubMed:16971510}., Isoform 3 is involved in regulation of transcription. Associated with transcriptional active ribosomal genes. Appears to cooperate with the WICH chromatin-remodeling complex to facilitate transcription. Necessary for the formation of the first phosphodiester bond during transcription initiation.</p>
Molecular Weight:	122.9 kDa Including tag.
UniProt:	Q9WTI7
Pathways:	Platelet-derived growth Factor Receptor Signaling

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:	Protein has not been tested for activity yet. 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.

Application Details

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