

Datasheet for ABIN3094022

## Myosin IC Protein (MYO1C) (AA 1-1063) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	Myosin IC (MYO1C)
Protein Characteristics:	AA 1-1063
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Myosin IC protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

### Product Details

Brand:	AliCE®
Sequence:	<p>MALQVELVPT GEIRVVHPH 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 NHGERNFHIF</p> <p>YQLLEGEEEE TLRRGLERN PQSYLYLVKG QCAKVSSIND KSDWKVVRKA LTVIDFTEDE</p> <p>VEDLLSIVAS VLHLGNIHFA ANEESNAQVT TENQLKYLTR LLSVEGSTLR EALTHRKIIA</p> <p>KGEELLSPLN LEQAAYARDA LAKAVYSRTF TWLVGKINRS LASKDVESPS WRSTTVLGLL</p> <p>DIYGFEVFQH NSFEQFCINY CNEKLQQLFI ELTLKSEQEE YEAEGIAWEP VQYFNNKIIC</p> <p>DLVEEKFKGI ISILDEECLR PGEATDLTFL EKLEDTVKHH PHFLTHKLAD QRTRKSLGRG</p> <p>EFRLHYAGE VTYSVTGFLD KNNDLLFRNL KETMCSSKNP IMSQCFDRSE LSDKKRPETV</p> <p>ATQFKMSLLQ LVEILQSKEP AYVRCIKPND AKQPGRFDEV LIRHQVKYLG LLENLRVRR</p>

GFAYRRKYEA FLQRYKSLCP ETWPTWAGRP QDGVAVLVRH LGYKPPEEYKM GRTKIFIRFP  
KTLFATEDAL EVRRQSLATK IQAAWRGFHW RQKFLRVKRS AICIQSWWRG TLGRRKAAKR  
KWAAQTIRRL IRGFVLRHAP RCPENAFFLD HVRTSFLNL RRQLPQNVLD TSWPTPPPAL  
REASELLREL CIKNMVWKYC RSISPEWKQ LQQKAVASEI FKGKKDNYPQ SVPRLFISTR  
LGTDEISPRV LQALGSEPIQ YAVPVVKYDR KGYKPRSRQL LLTPNAVIV EDAKVKQRID  
YANLTGISVS SLSDSLFVLH VQRADNKQKG DVVLQSDHVI ETLTKTALSA NRVNSININQ  
GSITFAGGPG RDGTIDFTPG SELLITKAKN GHLAVVAPRL NSR

**Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**

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### Characteristics:

#### Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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 try to ensure that you receive soluble 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.

#### Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

#### Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.

## Product Details

- The protein's absorbance will be measured against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Purification: One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

## Target Details

Target: Myosin IC (MYO1C)

Alternative Name: MYO1C ([MYO1C Products](#))

Background: Unconventional myosin-Ic (Myosin I beta) (MMI-beta) (MMIb),FUNCTION: Myosins are actin-based motor molecules with ATPase activity. Unconventional myosins serve in intracellular movements. Their highly divergent tails are presumed to bind to membranous compartments, which would be 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:24636949}., FUNCTION: [Isoform 3]: 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. {ECO:0000250|UniProtKB:Q9WTI7}.

Molecular Weight: 121.7 kDa

UniProt: [O00159](#)

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.

## Application Details

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Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.</p> <p>During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!</p>
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Restrictions:	For Research Use only
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## Handling

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Format:	Liquid
Buffer:	<p>The buffer composition is at the discretion of the manufacturer.</p> <p>Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b></p>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months