

# Datasheet for ABIN3093967

# MYO3B Protein (AA 1-1341) (Strep Tag)



### Overview

Quantity:	250 μg
Target:	MYO3B
Protein Characteristics:	AA 1-1341
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MYO3B protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details		
Brand:	AliCE®	
Sequence:	MKHLYGLFHY NPMMLGLESL PDPTDTWEII ETIGKGTYGK VYKVTNKRDG SLAAVKILDP	
	VSDMDEEIEA EYNILQFLPN HPNVVKFYGM FYKADHCVGG QLWLVLELCN GGSVTELVKG	
	LLRCGQRLDE AMISYILYGA LLGLQHLHNN RIIHRDVKGN NILLTTEGGV KLVDFGVSAQ	
	LTSTRLRRNT SVGTPFWMAP EVIACEQQYD SSYDARCDVW SLGITAIELG DGDPPLFDMH	
	PVKTLFKIPR NPPPTLLHPE KWCEEFNHFI SQCLIKDFER RPSVTHLLDH PFIKGVHGKV	
	LFLQKQLAKV LQDQKHQNPV AKTRHERMHT RRPYHVEDAE KYCLEDDLVN LEVLDEDTII	
	HQLQKRYADL LIYTYVGDIL IALNPFQNLS IYSPQFSRLY HGVKRASNPP HIFASADAAY	
	QCMVTLSKDQ CIVISGESGS GKTESAHLIV QHLTFLGKAN NQTLREKILQ VNSLVEAFGN	
	SCTAINDNSS RFGKYLEMMF TPTGVVMGAR ISEYLLEKSR VIKQAAREKN FHIFYYIYAG	
	LHHQKKLSDF RLPEEKPPRY IADETGRVMH DITSKESYRR QFEAIQHCFR IIGFTDKEVH	
	SVYRILAGIL NIGNIEFAAI SSQHQTDKSE VPNAEALQNA ASVLCISPEE LQEALTSHCV	

VTRGETIIRA NTVDRAADVR DAMSKALYGR LFSWIVNRIN TLLQPDENIC SAGGGMNVGI
LDIFGFENFQ RNSFEQLCIN IANEQIQYYF NQHVFALEQM EYQNEGIDAV PVEYEDNRPL
LDMFLQKPLG LLALLDEESR FPQATDQTLV DKFEDNLRCK YFWRPKGVEL CFGIQHYAGK
VLYDASGVLE KNRDTLPADV VVVLRTSENK LLQQLFSIPL TKTGNLAQTR ARITVASSSL
PPHFSAGKAK VDTLEVIRHP EETTNMKRQT VASYFRYSLM DLLSKMVVGQ PHFVRCIKPN
DDREALQFSR ERVLAQLRST GILETVSIRR QGYSHRILFE EFVKRYYYLA FTAHQTPLAS
KESCVAILEK SRLDHWVLGK TKVFLKYYHV EQLNLLLREV IGRVVVLQAY TKGWLGARRY
KRVREKREKG AIAIQSAWRG YDARRKFKKI SNRRNESAAH NQAGDTSNQS SGPHSPVAAG
TRGSAEVQDC SEPGDHKVLR GSVHRRSHSQ AESNNGRTQT SSNSPAVTEK NGHSQAQSSP
KGCDIFAGHA NKHSVSGTDL LSSRICHPAP DQQGLSLWGA PQKPGSENGL AQKHRTPRRR
CQQPKMLSSP EDTMYYNQLN GTLEYQGSKR KPRKLGQIKV LDGEDEYYKS LSPVDCIPEE
NNSAHPSFFS SSSKGDSFAQ H

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.

#### 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 posttranslational 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:

MY03B

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

Alternative Name:	MYO3B (MYO3B Products)
Background:	Myosin-IIIb (EC 2.7.11.1),FUNCTION: Probable actin-based motor with a protein kinase activity.
	Required for normal cochlear hair bundle development and hearing. Plays an important role in
	the early steps of cochlear hair bundle morphogenesis. Influences the number and lengths of
	stereocilia to be produced and limits the growth of microvilli within the forming auditory hair
	bundles thereby contributing to the architecture of the hair bundle, including its staircase
	pattern. Involved in the elongation of actin in stereocilia tips by transporting the actin regulatory
	factor ESPN to the plus ends of actin filaments. {ECO:0000250 UniProtKB:Q1EG27}.
Molecular Weight:	151.8 kDa
UniProt:	Q8WXR4

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:	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

## **Application Details**

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!

Restrictions:

For Research Use only

# Handling

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