Datasheet for ABIN3093980

MYO1E Protein (AA 1-1108) (Strep Tag)

1 Image

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Overview

Quantity:	1 mg
Target:	MYO1E
Protein Characteristics:	AA 1-1108
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MYO1E protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Sequence: MGSKGVYQYH WQSHNVKHSG VDDMVLLSKI TENSIVENLK KRYMDDYIFT YIGSVLISVN PFKQMPYFGE KEIEMYQGAA QYENPPHIYA LADNMYRNMI IDRENQCVII SGESGAGKTV AAKYIMSYIS RVSGGGTKVQ HVKDIILQSN PLLEAFGNAK TVRNNNSSRF GKYFEIQFSP GGEPDGGKIS NFLLEKSRVV MRNPGERSFH IFYQLIEGAS AEQKHSLGIT SMDYYYYLSL SGSYKVDDID DRREFQETLH AMNVIGIFAE EQTLVLQIVA GILHLGNISF KEVGNYAAVE SEEFLAFPAY LLGINQDRLK EKLTSRQMDS KWGGKSESIH VTLNVEQACY TRDALAKALH ARVFDFLVDS INKAMEKDHE EYNIGVLDIY GFEIFQKNGF EQFCINFVNE KLQQIFIELT LKAEQEEYVQ EGIRWTPIEY FNNKIVCDLI ENKVNPPGIM SILDDVCATM HAVGEGADQT LLQKLQMQIG SHEHFNSWNQ GFIIHHYAGK VSYDMDGFCE RNRDVLFMDL IELMQSSELP FIKSLFPENL QADKKGRPTT AGSKIKKQAN DLVSTLMKCT PHYIRCIKPN ETKKPRDWEE SRVKHQVEYL GLKENIRVRR AGYAYRRIFQ KFLQRYAILT KATWPSWQGE EKQGVLHLLQ SVNMDSDQFQ LGRSKVFIKA PESLFLLEEM RERKYDGYAR VIQKSWRKFV ARKKYVQMRE

EASDLLLNKK ERRRNSINRN FIGDYIGMEE HPELQQFVGK REKIDFADTV TKYDRRFKGV KRDLLLTPKC LYLIGREKVK QGPDKGLVKE VLKRKIEIER ILSVSLSTMQ DDIFILHEQE YDSLLESVFK TEFLSLLAKR YEEKTQKQLP LKFSNTLELK LKKENWGPWS AGGSRQVQFH QGFGDLAVLK PSNKVLQVSI GPGLPKNSRP TRRNTTQNTG YSSGTQNANY PVRAAPPPPG YHQNGVIRNQ YVPYPHAPGS QRSNQKSLYT SMARPPLPRQ QSTSSDRVSQ TPESLDFLKV PDQGAAGVRR QTTSRPPPAG GRPKPQPKPK PQVPQCKALY AYDAQDTDEL SFNANDIIDI IKEDPSGWWT GRLRGKQGLF PNNYVTKI

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 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.

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:

Product Details

- 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.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. 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:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	MYO1E
Alternative Name:	MYO1E (MYO1E Products)
Background:	Unconventional myosin-Ie (Myosin-Ic) (Unconventional myosin 1E),FUNCTION: Actin-based motor molecule with ATPase activity (PubMed:11940582, PubMed:36316095). Unconventional myosins serve in intracellular movements. Their highly divergent tails bind to membranous compartments, which are then moved relative to actin filaments. Binds to membranes containing anionic phospholipids via its tail domain. Involved in clathrin-mediated endocytosis and intracellular movement of clathrin-coated vesicles (PubMed:36316095). Required for normal morphology of the glomerular basement membrane, normal development of foot processes by kidney podocytes and normal kidney function. In dendritic cells, may control the movement of class II-containing cytoplasmic vesicles along the actin cytoskeleton by connecting them with the actin network via ARL14EP and ARL14. {ECO:0000269|PubMed:11940582, ECO:0000269|PubMed:17257598, ECO:0000269|PubMed:20860408, ECO:0000269|PubMed:36316095}.
Molecular Weight:	127.1 kDa
UniProt:	Q12965

Target Details

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:	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!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

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

