Datasheet for ABIN3094042

Myosin VI Protein (MYO6) (AA 1-1294) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	Myosin VI (MYO6)
Protein Characteristics:	AA 1-1294
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Myosin VI protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MEDGKPVWAP HPTDGFQMGN IVDIGPDSLT IEPLNQKGKT FLALINQVFP AEEDSKKDVE DNCSLMYLNE ATLLHNIKVR YSKDRIYTYV ANILIAVNPY FDIPKIYSSE AIKSYQGKSL GTRPPHVFAI ADKAFRDMKV LKMSQSIIVS GESGAGKTEN TKFVLRYLTE SYGTGQDIDD RIVEANPLLE AFGNAKTVRN NNSSRFGKFV EIHFNEKSSV VGGFVSHYLL EKSRICVQGK EERNYHIFYR LCAGASEDIR EKLHLSSPDN FRYLNRGCTR YFANKETDKQ ILQNRKSPEY LKAGSMKDPL LDDHGDFIRM CTAMKKIGLD DEEKLDLFRV VAGVLHLGNI DFEEAGSTSG GCNLKNKSAQ SLEYCAELLG LDQDDLRVSL TTRVMLTTAG GTKGTVIKVP LKVEQANNAR DALAKTVYSH LFDHVVNRVN QCFPFETSSY FIGVLDIAGF EYFEHNSFEQ FCINYCNEKL QQFFNERILK EEQELYQKEG LGVNEVHYVD NQDCIDLIEA KLVGILDILD EENRLPQPSD QHFTSAVHQK HKDHFRLTIP RKSKLAVHRN IRDDEGFIIR HFAGAVCYET TQFVEKNNDA LHMSLESLIC ESRDKFIREL FESSTNNNKD TKQKAGKLSF ISVGNKFKTQ LNLLLDKLRS

TGASFIRCIK PNLKMTSHHF EGAQILSQLQ CSGMVSVLDL MQGGYPSRAS FHELYNMYKK YMPDKLARLD PRLFCKALFK ALGLNENDYK FGLTKVFFRP GKFAEFDQIM KSDPDHLAEL VKRVNHWLTC SRWKKVQWCS LSVIKLKNKI KYRAEACIKM QKTIRMWLCK RRHKPRIDGL VKVGTLKKRL DKFNEVVSVL KDGKPEMNKQ IKNLEISIDT LMAKIKSTMM TQEQIQKEYD ALVKSSEELL SALQKKKQQE EEAERLRRIQ EEMEKERKRR EEDEKRRRKE EEERRMKLEM EAKRKQEEEE RKKREDDEKR IQAEVEAQLA RQKEEESQQQ AVLEQERRDR ELALRIAQSE AELISDEAQA DLALRRSLDS YPVSKNDGTR PKMTPEQMAK EMSEFLSRGP AVLATKAAAG TKKYDLSKWK YAELRDTINT SCDIELLAAC REEFHRRLKV YHAWKSKNKK RNTETEQRAP KSVTDYDFAP FLNNSPQQNP AAQIPARQRE IEMNRQQRFF RIPFIRPADQ YKDPQSKKKG WWYAHFDGPW IARQMELHPD KPPILLVAGK DDMEMCELNL EETGLTRKRG AEILPRQFEE IWERCGGIQY LQNAIESRQA RPTYATAMLQ SLLK

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 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 -

Product Details

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.
- 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 VI (MYO6)
Alternative Name:	MYO6 (MYO6 Products)
Background:	Unconventional myosin-VI (Unconventional myosin-6),FUNCTION: Myosins are actin-based motor molecules with ATPase activity (By similarity). Unconventional myosins serve in intracellular movements (By similarity). Myosin 6 is a reverse-direction motor protein that moves towards the minus-end of actin filaments (PubMed:10519557). Has slow rate of actin-activated ADP release due to weak ATP binding (By similarity). Functions in a variety of intracellular processes such as vesicular membrane trafficking and cell migration (By similarity). Required for the structural integrity of the Golgi apparatus via the p53-dependent pro-survival pathway (PubMed:16507995). Appears to be involved in a very early step of clathrin-mediated endocytosis in polarized epithelial cells (PubMed:11447109). Together with TOM1, mediates delivery of endocytic cargo to autophagosomes thereby promoting autophagosome maturation and driving fusion with lysosomes (PubMed:23023224). Links TOM1 with autophagy receptors, such as TAX1BP1, CALCOCO2/NDP52 and OPTN (PubMed:31371777). May act as a regulator of F-actin dynamics (By similarity). As part of the DISP complex, may regulate the association of septins with actin and thereby regulate the actin cytoskeleton (PubMed:29467281). May play a role in transporting DAB2 from the plasma membrane to specific cellular targets (By similarity). May play a role in the extension and network organization of neurites (By similarity). Required for structural integrity of inner ear hair cells (By similarity). Modulates RNA polymerase II-dependent transcription

Target Details

	(PubMed:16949370). {ECO:0000250|UniProtKB:Q29122, ECO:0000250|UniProtKB:Q64331, ECO:0000269|PubMed:10519557, ECO:0000269|PubMed:11447109, ECO:0000269|PubMed:16507995, ECO:0000269|PubMed:16949370, ECO:0000269|PubMed:23023224, ECO:0000269|PubMed:29467281, ECO:0000269|PubMed:31371777}.
Molecular Weight:	149.7 kDa
UniProt:	Q9UM54
Pathways:	Sensory Perception of Sound, Dicarboxylic Acid Transport, Asymmetric Protein Localization

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. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.

Handling

Expiry Date:	12 months