

Datasheet for ABIN3135589

## Myosin VI Protein (MYO6) (AA 1-1265) (His tag)



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### 1 Image

#### Overview

Quantity:	1 mg
Target:	Myosin VI (MYO6)
Protein Characteristics:	AA 1-1265
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Myosin VI protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

#### Product Details

Sequence:	<p>MEDGKPVWAP HPTDGFQMG N IVDIGPDSL T IEPLNQKGKT FGALINQVFP AEEDSKKDVE</p> <p>DNCSLMYLN E ATLLHNVKVR YSKDRIYTYV ANILIAVNPY FDIPIYSSD TIKSYQGKSL</p> <p>GTMPPHVFGI ADKAFRDMKV LKMSQSIIVS GESGAGKTEN TKFGSKIPDR ILWTGQDIDD</p> <p>RIVEANPLLE AFGNAKTVRN NNSSRFGKFV EIHFNKSSV VGGFVSHYLL EKSRIQVQ GK</p> <p>EERNHHIFYR LCAGASEDIR EKLHLSSPDN FRYLNRGCTR FFANKETDKQ ILQNRKSPEY</p> <p>VKAGSLEGSS IRRPWRFYQD VHSHEKNWFG MMKKNFDLFR VVAGVLHLGN IDLEEAGSTS</p> <p>GGCNLKNKSA PSLEYCAELL GLDQDDL RVS LTTRVMLTTA GGTKGTVIKV PLKVEQANNA</p> <p>RDALAKTVYS HLFDHVVNRV NQCFFETSS YFIGVLDIAG FEYFEHNSFE QFCINYCNEK</p> <p>LQQFFNERIL KEEQELYQKE GLGVNEVHYV DNQDCIELIE VKLVGILDIL DEENRLPQPS</p> <p>DQHFTSVVHQ KHKDHFR LTI PRKSKLAVHR NLRDDEGFII RQLCRGRVLR RQPQYGGGKN</p> <p>NDALHMSLES LICESRDKFI RALFESSTNN SKDTKQKAGK LSFISVGNKF KTQLNLLLDK</p> <p>LRSTGASFIR CIKPNLKMAS HHFEQAQILS QLQCSGMVSV LDLMQGGFPS RASFHELYNM</p>
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YKKYMPEKLP RLDPRLFCCKP LFKALGLNEV DYKFGLTQVF FRPGKFAEFD QIMKSDPDHL  
AELVKRVNLW LVCSRWKKVQ WCSLSVIKLL NIKIYRAEAC IKMQKPIRMW LCKRRHNPRI  
DGLVKVGTKL KRLDKFNEVV SALKDGKPEV NRQIKNLEIS IDALMAKFTS TMMTRETIQK  
EYDALVKSSE DLLSALQKKK QEEEEAERLR RIQEEMEKEK KRREDEERR RKEEEERRMK  
LEMEPKRKQE EEERKKREDD EKRIQSEVEA QLARQEEES QQQAVLAQEC RDRELALRIA  
QNESELISDE AQGDMALRRG PAVQATKAAS GTKKHDLSKW KYAELRDTIN TSCDIELLAA  
CREEFHRRLL VYHAWKSKNK KRNTETEQA PKSVTDYDFA PFLNNSPQQN PAAQLPARQQ  
EIDMKRQQR FRIPIRPAD QYKDPQNKKK GWWYAHFDGP WIARQMELHP DKPPILLVAG  
KDDMEMCELN LEETGLTRKR GAELPRQFE EIWERCGGIQ YLQSAIESRQ ARPTYATAML QNLLK

**Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

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### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Myo6 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.

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### 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

## Product Details

- 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:	>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 VI (MYO6)
Alternative Name:	Myo6 ( <a href="#">MYO6 Products</a> )
Background:	<p>Myosins are actin-based motor molecules with ATPase activity. Unconventional myosins serve in intracellular movements. Myosin 6 is a reverse-direction motor protein that moves towards the minus-end of actin filaments. Has slow rate of actin-activated ADP release due to weak ATP binding. Functions in a variety of intracellular processes such as vesicular membrane trafficking and cell migration. Required for the structural integrity of the Golgi apparatus via the p53-dependent pro-survival pathway. Appears to be involved in a very early step of clathrin-mediated endocytosis in polarized epithelial cells. May act as a regulator of F-actin dynamics. May play a role in transporting DAB2 from the plasma membrane to specific cellular targets. Required for structural integrity of inner ear hair cells.</p>
Molecular Weight:	147.4 kDa Including tag.
UniProt:	<a href="#">Q64331</a>
Pathways:	<a href="#">Sensory Perception of Sound</a> , <a href="#">Dicarboxylic Acid Transport</a> , <a href="#">Asymmetric Protein Localization</a>

## 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

## Application Details

options with you in detail to assure that you receive your protein of interest.

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