Datasheet for ABIN3137632

MTM1 Protein (AA 1-603) (GST tag,His tag)

3 Images

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Overview

Quantity:	1 mg
Target:	MTM1
Protein Characteristics:	AA 1-603
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MTM1 protein is labelled with GST tag,His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MASASASKYN SHSLENESIK KVSQDGVSQD VSETVPRLPG ELLITEKEVI YICPFNGPIK GRVYITNYRL YLRSLETDSA LILDVPLGVI SRIEKMGGAT SRGENSYGLD ITCKDLRNLR FALKQEGHSR RDMFEILVKH AFPLAHNLPL FAFVNEEKFN VDGWTVYNPV EEYRRQGLPN HHWRISFINK CYELCETYPA LLVVPYRTSD DDLRRIATFR SRNRLPVLSW IHPENKMVIM RCSQPLVGMS GKRNKDDEKY LDVIRETNKQ TSKLMIYDAR PSVNAVANKA TGGGYESDDA YQNSELSFLD IHNIHVMRES LKKVKDIVYP NIEESHWLSS LESTHWLEHI KLVLTGAIQV ADQVSSGKSS VLVHCSDGWD RTAQLTSLAM LMLDSFYRTI EGFEILVQKE WISFGHKFAS RIGHGDKNHA DADRSPIFLQ FIDCVWQMSK QFPTAFEFNE GFLITVLDHL YSCRFGTFLF NCDSARERQK LTERTVSLWS LINSNKDKFK NPFYTKEINR VLYPVASMRH LELWVNYYIR WNPRVKQQQP NPVEQRYMEL LALRDDYIKR LEELQLANSA KLADAPASTS SSSQMVPHVQ THF
Specificity:	N-terminal GST-Tag, C-terminal His-Tag

Product Details

Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Mouse Mtm1 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 made-to-order protein has already been successfully produced. Please let us know if you are interested in purchasing a smaller amount of this protein. We will check our stock and make you a customized quote in case we can provide this protein in a smaller amount.. When you order this made-to-order protein you will only pay upon receival 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.
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 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:	MTM1
Alternative Name:	Mtm1 (MTM1 Products)
Background:	Lipid phosphatase which dephosphorylates phosphatidylinositol 3-monophosphate (PI3P) and phosphatidylinositol 3,5-bisphosphate (PI(3,5)P2). Has also been shown to dephosphorylate phosphotyrosine- and phosphoserine-containing peptides. Negatively regulates EGFR degradation through regulation of EGFR trafficking from the late endosome to the lysosome.

Target Details

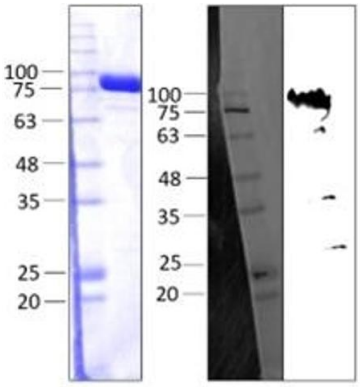
	Plays a role in vacuolar formation and morphology (By similarity). Regulates desmin intermediate filament assembly and architecture. Plays a role in mitochondrial morphology and positioning. Required for skeletal muscle maintenance but not for myogenesis. {ECO:0000250|UniProtKB:Q13496, ECO:0000269|PubMed:12391329, ECO:0000269|PubMed:21135508}.
Molecular Weight:	70.5 kDa Including tag.
UniProt:	Q9Z2C5
Pathways:	Inositol Metabolic Process, Skeletal Muscle Fiber Development

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 gurantee 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 options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	20 mM Tris, pH 8.0; 300 mM NaCl, 2 mM EDTA, 2 mM DTT
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

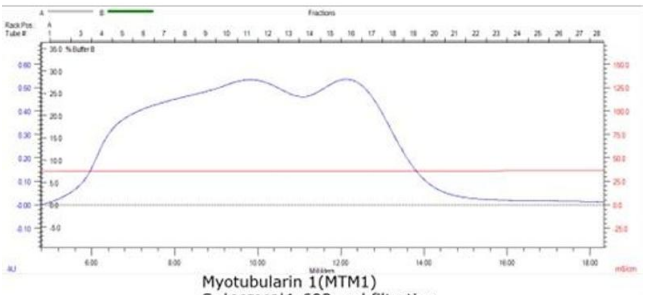


Myotubularin 1
(MTM1)
sp|Q9Z2C5|1-603
Fraction 9-22

Western Blotting

Image 1.

Image 2. „Crystallography Grade“ protein due to multi-step, protein-specific purification process



Myotubularin 1(MTM1)
Sp|Q9Z2C5|1-603, gel filtration,
Superdex 200 fraction 9-22

Size-exclusion chromatography-High Pressure Liquid Chromatography

Image 3.