

Datasheet for ABIN3084035

## MTMR6 Protein (AA 1-621) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	MTMR6
Protein Characteristics:	AA 1-621
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MTMR6 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Brand:	AlIcE®
Sequence:	<p>MEHIRTTKVE QVKLLDRFST SNKSLTGTLY LTATHLLFID SHQKETWILH HHIASVEKLA  LTTSGCPLVI QCKNFRTVHF IVPREDCHD IYNSLLQLSK QAKYEDLYAF SYNPKQNDSE  RLQGWLIDL AEEYKRMGVP NSHWQLSDAN RDYKICETYP RELYVPRIAS KPIIVGSSKF  RSKGRFPVLS YYHQDKEAAI CRCSQPLSGF SARCLEDEHL LQAISKANPV NRYMYVMDTR  PKLNAMANRA AGKGYENEDN YSNIRFQFVG IENIHVMRSS LQKLLEVNGT KGLSVNDFYS  GLESSGWLRLH IKAVMDAAIF LAKAITVENA SVLVHCSDGW DRTSQVCSLG SLLDLSYYRT  IKGFMVLEIK DWISFGHKFS ERCGQLDGDV KEVSPVFTQF LECVWHLTEQ FPQAFEFSEA  FLLQIHEHIH SCQFGNFLGN CQKEREELKL KEKTYSLWPF LLEDQKKYLN PLYSSESHRF  TVLEPNTVSF NFKFWRNMYH QFDRTLHPRQ SVFNIIIMNMN EQNKQLEKDI KDLESKIKQR  KNKQTDGILT KELLHSVHPE SPNLKTSLCF KEQTLLPVND ALRTIEGSSP ADNRYSEYAE  EFSKSEPAVV SLEYGVARMT C</p>

**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.**

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### 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 - 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.

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### Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

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### Purity:

> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

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## Product Details

Grade: custom-made

## Target Details

Target: MTMR6

Alternative Name: MTMR6 ([MTMR6 Products](#))

Background: Myotubularin-related protein 6 (Phosphatidylinositol-3,5-bisphosphate 3-phosphatase) (EC 3.1.3.95) (Phosphatidylinositol-3-phosphate phosphatase) (EC 3.1.3.64),FUNCTION: Phosphatase that acts on lipids with a phosphoinositol headgroup (PubMed:19038970, PubMed:22647598). Dephosphorylates phosphatidylinositol 3-phosphate (PtdIns(3)P) and phosphatidylinositol 3,5-bisphosphate (PubMed:19038970, PubMed:22647598) (Probable). Binds with high affinity to phosphatidylinositol 3,5-bisphosphate (PtdIns(3,5)P2) but also to phosphatidylinositol 3-phosphate (PtdIns(3)P), phosphatidylinositol 4-phosphate (PtdIns(4)P), and phosphatidylinositol 5-phosphate (PtdIns(5)P), phosphatidic acid and phosphatidylserine (PubMed:19038970). Negatively regulates ER-Golgi protein transport (By similarity). Probably in association with MTMR9, plays a role in the late stages of macropinocytosis by dephosphorylating phosphatidylinositol 3-phosphate in membrane ruffles (PubMed:24591580). Acts as a negative regulator of KCNN4/KCa3.1 channel activity in CD4(+) T-cells possibly by decreasing intracellular levels of phosphatidylinositol 3-phosphate (PubMed:15831468). Negatively regulates proliferation of reactivated CD4(+) T-cells (PubMed:16847315). In complex with MTMR9, negatively regulates DNA damage-induced apoptosis (PubMed:19038970, PubMed:22647598). The formation of the MTMR6-MTMR9 complex stabilizes both MTMR6 and MTMR9 protein levels (PubMed:19038970). {ECO:0000250|UniProtKB:A0A0G2JXT6, ECO:0000269|PubMed:15831468, ECO:0000269|PubMed:16847315, ECO:0000269|PubMed:19038970, ECO:0000269|PubMed:22647598, ECO:0000269|PubMed:24591580, ECO:0000305|PubMed:24591580}.

Molecular Weight: 72.0 kDa

UniProt: [Q9Y217](#)

Pathways: [Inositol Metabolic Process](#)

## 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.

## Application Details

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Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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!</p>
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Restrictions:	For Research Use only
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## Handling

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