

# Human MTM1, His Tag, E. coli

 Catalog Number
 LDG181PHE

 Package
 5 μg / 20 μg / 100 μg / Customized package

For full product information, images and publications, please visit our website.



# **Specifications**

**Species of Origin** 

Human

**Affinity Tag** 

His Tag (N-term)

**Purity** 

>95% as determined by SDS-PAGE analysis.

**Endotoxin Level** 

<1.0 EU per 1  $\mu$ g of the protein by the LAL method.

**Expression System** 

Escherichia coli

**Storage Buffer** 

Lyophilized from a 0.2  $\mu$ m filtered solution of PBS, pH 7.4.

Molecular weight

The protein has a calculated MW of 70.75 kDa. The protein migrates as 60 kDa uder reducing condition (SDS-PAGE analysis).

Form

Lyophilized

# Background



## **Background**

Myotubularin is a protein that plays a crucial role in cellular processes and is primarily associated with a rare genetic disorder called myotubular myopathy (MTM). This disorder primarily affects skeletal muscles and is characterized by severe muscle weakness and impaired motor function.

Myotubularin is an enzyme that regulates the levels of a lipid molecule called phosphatidylinositol 3phosphate (PI3P) within cells. PI3P is involved in various cellular functions, including membrane trafficking and signaling pathways. Mutations in the gene encoding myotubularin lead to a deficiency or loss of its enzymatic activity, disrupting PI3P metabolism and causing the development of MTM.

**Uniprot ID** 

#Q13496

### **Synonyms**

Phosphatidylinositol-3,5-bisphosphate 3-phosphatase, Phosphatidylinositol-3-phosphate phosphatase, CG2

**Sequence Note** 

Met1-Phe603

## Instruction

### Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile H<sub>2</sub>O to a concentration of 200 µg/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.

## Stability & Storage

This product is stable after storage at:

- -20°C for 12 months in lyophilized state from date of receipt.
- -20°C or -80°C for 1 month under sterile conditions after reconstitution.

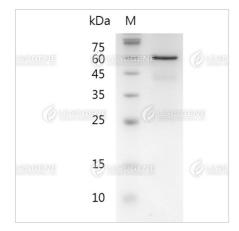
Avoid repeated freeze/thaw cycles.

### Shipping

The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long term storage.



## **Image**



SDS-PAGE analysis of recombinant human MTM1.

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