

Datasheet for ABIN3117599

## YME1L1 Protein (AA 1-773) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	YME1L1
Protein Characteristics:	AA 1-773
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This YME1L1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Brand:	AliCE®
Sequence:	<p>MFSLSSSTVQP QVTVPLSHLI NAFHTPKNTS VSLSGVSVSQ NQHRDVVPEH EAPSSECMFS</p> <p>DFLTCLNIVS IGKGKIFEGY RSMFMENPAKR MKKSLDITDN WHIRPEPFSL SIPPSLNLRD</p> <p>LGLSELKIGQ IDQLVENLLP GFCKGKNISS HWHTSHVSAQ SFFENKYGNL DIFSTLRSSC</p> <p>LYRHHSRALQ SICSDLQYWP VFIQSRGFKT LKSRTTRRLQS TSELAETQN IAPSFVKGFL</p> <p>LRDRGSDVES LDKLMKTKNI PEAHQDAFKT GFAEGFLKAQ ALTQKTNDL RRTLRILFVL</p> <p>LLFGIYGLLK NPFLSVRFRT TTGLDSAVDP VQMKNVTFEH VKGVVEAKQE LQEVVEFLKN</p> <p>PQKFTILGGK LPKGILLVGP PGTGKTLLAR AVAGEADVPE YYASGSEFDE MFVGVGASRI</p> <p>RNLFREAKAN APCVIFIDEL DSVGGKRIES PMHPYSRQTI NQLLAEMDGF KPNEGVIIG</p> <p>ATNFPEALDN ALIRPGRFDM QVTVPRPDVK GRTEILKWYL NKIKFDQSVD PEIARGTVG</p> <p>FSGAELENLV NQAALKAADV GKEMVTMKEL EFSKDKILMG PERRSVEIDN KNKTITAYHE</p> <p>SGHAIAYYT KDAMPINKAT IMPRGPTLGH VSLLPENDRW NETRAQLLAQ MDVSMGGRVA</p>

EELIFGTDHI TTGASSDFDN ATKIAKRMVT KFGMSEKLGV MTYSDTGKLS PETQSAIEQE  
IRILLRDSYE RAKHILKTHA KEHKNLAEAL LTYETLDAKE IQIVLEGKKL EVR

**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.

### Purification:

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

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## Product Details

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

Grade: custom-made

## Target Details

Target: YME1L1

Alternative Name: YME1L1 ([YME1L1 Products](#))

Background: ATP-dependent zinc metalloprotease YME1L1 (EC 3.4.24.-) (ATP-dependent metalloprotease FtsH1) (Meg-4) (Presenilin-associated metalloprotease) (PAMP) (YME1-like protein 1),FUNCTION: ATP-dependent metalloprotease that catalyzes the degradation of folded and unfolded proteins with a suitable degron sequence in the mitochondrial intermembrane region (PubMed:26923599, PubMed:27786171). Plays an important role in regulating mitochondrial morphology and function by cleaving OPA1 at position S2, giving rise to a form of OPA1 that promotes maintenance of normal mitochondrial structure and mitochondrial protein metabolism (PubMed:18076378, PubMed:26923599, PubMed:27495975). Ensures cell proliferation, maintains normal cristae morphology and complex I respiration activity, promotes antiapoptotic activity and protects mitochondria from the accumulation of oxidatively damaged membrane proteins (PubMed:22262461). Required for normal, constitutive degradation of PRELID1 (PubMed:27495975). Catalyzes the degradation of OMA1 in response to membrane depolarization (PubMed:26923599). Required to control the accumulation of nonassembled respiratory chain subunits (NDUFB6, OX4 and ND1) (PubMed:22262461). {ECO:0000269|PubMed:18076378, ECO:0000269|PubMed:22262461, ECO:0000269|PubMed:26923599, ECO:0000269|PubMed:27495975, ECO:0000269|PubMed:27786171}.

Molecular Weight: 86.5 kDa

UniProt: [Q96TA2](#)

## 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

## Application Details

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modifications.

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Restrictions:	For Research Use only
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## Handling

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