

Datasheet for ABIN3100715

TMEM41B Protein (AA 1-291) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	TMEM41B
Protein Characteristics:	AA 1-291
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TMEM41B protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	<p>MAKGRVAERS QLGAHHTTPV GDGAAGTRGL AAPGSRDHQK EKSWEAGSA RMSLLILVSI FLSAAFVMFL VYKNFPQLSE EERVNMKVPR DMDDAKALGK VLSKYKDTFY VQVLVAYFAT YIFLQTFAIP GSIFLSILSG FLYPFPLALF LVCLCSGLGA SFCYMLSILV GRPVVYKYLT EKAVKWSQQV ERHREHLINY IIFLRITPFL PNWFINITSP VINVPLKVFF IGTFGLGVAPP SFVAIKAGTT LYQLTTAGEA VSWNSIFILM ILAVLSILPA IFQKKLKQKF E</p> <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.</p>

Characteristics:	<p>Key Benefits:</p> <ul style="list-style-type: none"> Made in Germany - from design to production - by highly experienced protein experts.
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Product Details

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

Target Details

Target:	TMEM41B
Alternative Name:	TMEM41B (TMEM41B Products)

Target Details

Background:	<p>Transmembrane protein 41B (Protein stasimon),FUNCTION: Phospholipid scramblase involved in lipid homeostasis and membrane dynamics processes (PubMed:34015269, PubMed:33929485, PubMed:33850023). Has phospholipid scramblase activity toward cholesterol and phosphatidylserine, as well as phosphatidylethanolamine and phosphatidylcholine (PubMed:34015269, PubMed:33929485, PubMed:33850023). Required for autophagosome formation: participates in early stages of autophagosome biogenesis at the endoplasmic reticulum (ER) membrane by reequilibrating the leaflets of the ER as lipids are extracted by ATG2 (ATG2A or ATG2B) to mediate autophagosome assembly (PubMed:30093494, PubMed:30126924, PubMed:30933966, PubMed:34015269, PubMed:33929485, PubMed:34043740, PubMed:33850023). In addition to autophagy, involved in other processes in which phospholipid scramblase activity is required (PubMed:33850023). Required for normal motor neuron development (By similarity).</p> <p>{ECO:0000250 UniProtKB:A1A5V7, ECO:0000269 PubMed:30093494, ECO:0000269 PubMed:30126924, ECO:0000269 PubMed:30933966, ECO:0000269 PubMed:33850023, ECO:0000269 PubMed:33929485, ECO:0000269 PubMed:34015269, ECO:0000269 PubMed:34043740}., FUNCTION: (Microbial infection) Critical host factor required for infection by human coronaviruses SARS-CoV-2, HCoV-OC43, HCoV-NL63, and HCoV-229E, as well as all flaviviruses tested such as Zika virus and Yellow fever virus (PubMed:33382968, PubMed:33338421). Required post-entry of the virus to facilitate the ER membrane remodeling necessary to form replication organelles (PubMed:33382968). {ECO:0000269 PubMed:33338421, ECO:0000269 PubMed:33382968, ECO:0000269 PubMed:34043740}.</p>
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Molecular Weight:	32.5 kDa
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UniProt:	Q5BJD5
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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.
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Comment:	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.
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Application Details

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Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.
Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months