

### Datasheet for ABIN3115423

# TMEM63B Protein (AA 1-832) (Strep Tag)



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Quantity:	250 μg
Target:	TMEM63B
Protein Characteristics:	AA 1-832
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TMEM63B protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Brand:	AliCE®
Sequence:	MLPFLLATLG TTALNNSNPK DYCYSARIRS TVLQGLPFGG VPTVLALDFM CFLALLFLFS
	ILRKVAWDYG RLALVTDADR LRRQERDRVE QEYVASAMHG DSHDRYERLT SVSSSVDFDQ
	RDNGFCSWLT AIFRIKDDEI RDKCGGDAVH YLSFQRHIIG LLVVVGVLSV GIVLPVNFSG
	DLLENNAYSF GRTTIANLKS GNNLLWLHTS FAFLYLLLTV YSMRRHTSKM RYKEDDLVKR
	TLFINGISKY AESEKIKKHF EEAYPNCTVL EARPCYNVAR LMFLDAERKK AERGKLYFTN
	LQSKENVPTM INPKPCGHLC CCVVRGCEQV EAIEYYTKLE QKLKEDYKRE KEKVNEKPLG
	MAFVTFHNET ITAIILKDFN VCKCQGCTCR GEPRPSSCSE SLHISNWTVS YAPDPQNIYW
	EHLSIRGFIW WLRCLVINVV LFILLFFLTT PAIIITTMDK FNVTKPVEYL NNPIITQFFP TLLLWCFSAL
	LPTIVYYSAF FEAHWTRSGE NRTTMHKCYT FLIFMVLLLP SLGLSSLDLF FRWLFDKKFL
	AEAAIRFECV FLPDNGAFFV NYVIASAFIG NAMDLLRIPG LLMYMIRLCL ARSAAERRNV
	KRHQAYEFQF GAAYAWMMCV FTVVMTYSIT CPIIVPFGLM YMLLKHLVDR YNLYYAYLPA

KLDKKIHSGA VNQVVAAPIL CLFWLLFFST MRTGFLAPTS MFTFVVLVIT IVICLCHVCF GHFKYLSAHN YKIEHTETDT VDPRSNGRPP TAAAVPKSAK YIAQVLQDSE VDGDGDGAPG SSGDEPPSSS SQDEELLMPP DALTDTDFQS CEDSLIENEI HQ

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.

#### 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 posttranslational 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

#### **Product Details**

Product Details		
	System (AliCE®).	
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).	
Grade:	custom-made	
Target Details		
Target:	TMEM63B	
Alternative Name:	TMEM63B (TMEM63B Products)	
Background:	CSC1-like protein 2 (Transmembrane protein 63B),FUNCTION: Acts as an osmosensitive calcium-permeable cation channel (By similarity). Mechanosensitive ion channel that converts mechanical stimuli into a flow of ion (PubMed:37543036). Acts as an inner ear osmosensor, essential for normal hearing and survival of inner ear outer hair cells (OHCs). Mediates calcium-dependent regulatory volume decrease in OHCs which is necessary for their survival. Required for the maintenance of the morphological integrity of OHCs under hypotonic conditions. Mediates hypo-osmolarity-induced calcium influx, leading to activation of calcium-dependent potassium channels required for the maintenance of OHC morphology (By similarity). {ECO:0000250 UniProtKB:Q3TWI9, ECO:0000269 PubMed:37543036}.	
Molecular Weight:	95.0 kDa	
UniProt:	Q5T3F8	
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 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	

## **Application Details**

	needed is the DNA that codes for the desired protein!
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 <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months