

## Datasheet for ABIN7557096

# TMEM63B Protein (AA 1-832) (His tag)



## Overview

| Quantity:                     | 1 mg   |
|-------------------------------|--|
| Target:                       | TMEM63B  |
| Protein Characteristics:      | AA 1-832                                       |
| Origin:                       | Mouse  |
| Source:                       | HEK-293 Cells                                  |
| Protein Type:                 | Recombinant                                    |
| Purification tag / Conjugate: | This TMEM63B protein is labelled with His tag. |

### **Product Details**

| Purpose:  | Custom-made recombinant Tmem63b Protein expressed in mammalian cells.        |
|-----------|--|
| Sequence: | MLPFLLATLG TAALNSSNPK DYCYSARIRS TVLQGLPFGG VPTVLALDFM CFLALLFLFS            |
|           | ILRKVAWDYG RLALVTDADR LRRQERERVE QEYVASAMHG DSHDRYERLT SVSSSVDFDQ            |
|           | RDNGFCSWLT AIFRIKDDEI RDKCGGDAVH YLSFQRHIIG LLVVVGVLSV GIVLPVNFSG            |
|           | DLLENNAYSF GRTTIANLKS GNNLLWLHTS FAFLYLLLTV YSMRRHTSKM RYKEDDLVKR            |
|           | TLFINGISKY AESEKIKKHF EEAYPNCTVL EARPCYNVAR LMFLDAERKK AERGKLYFTN            |
|           | LQSKENVPAM INPKPCGHLC CCVVRGCEQV EAIEYYTKLE QRLKEDYRRE KEKVNEKPLG            |
|           | MAFVTFHNET ITAIILKDFN VCKCQGCTCR GEPRASSCSE ALHISNWTVT 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 YKIEHTETDA VSSRSNGRPP TAGAVPKSAK YIAQVLQDSE GDGDGDGAPG                               |
|------------------|---|
|                  | SSGDEPPSSS SQDEELLMPP DGLTDTDFQS CEDSLIENEI HQ Sequence without tag. The                        |
|                  | proposed Purification-Tag is based on experiences 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.   |
| Specificity:     | If you are looking for a specific domain and are interested in a partial protein or a different |
|                  | isoform, please contact us regarding an individual offer.                                       |
| Characteristics: | Key Benefits:   |

### Cha

custom-made

TMEM63B

- · Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalian cells and purified in one-step affinity chromatography
- · The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

### **Target Details**

Purity:

Grade:

Target:

| Alternative Name: | Tmem63b (TMEM63B Products)  |
|-------------------|---|
| Background:       | CSC1-like protein 2 (Transmembrane protein 63B),FUNCTION: Acts as an osmosensitive          |
|                   | calcium-permeable cation channel (PubMed:27045885, PubMed:31243992, PubMed:37543036,        |
|                   | PubMed:32375046). Mechanosensitive ion channel that converts mechanical stimuli into a flow |
|                   | of ion (PubMed:30382938, PubMed:37543036). Acts as an inner ear osmosensor, essential for   |
|                   | normal hearing and survival of inner ear outer hair cells (OHCs)(PubMed:32375046). Mediates |
|                   | calcium-dependent regulatory volume decrease in OHCs which is necessary for their survival  |
|                   |   |

### **Target Details**

(PubMed:32375046). Required for the maintenance of the morphological integrity of OHCs under hypotonic conditions (PubMed:32375046). Mediates hypo-osmolarity-induced calcium influx, leading to activation of calcium-dependent potassium channels required for the maintenance of OHC morphology (PubMed:32375046). {ECO:0000269|PubMed:37045885, ECO:0000269|PubMed:30382938, ECO:0000269|PubMed:31243992, ECO:0000269|PubMed:32375046, ECO:0000269|PubMed:37543036}.

Molecular Weight:

94.8 kDa

UniProt:

Q3TWI9

### **Application Details**

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for

functional studies yet we cannot offer a guarantee though.

Restrictions:

For Research Use only

12 months

### Handling

**Expiry Date:** 

| Format:          | Liquid   |
|------------------|--|
| Buffer:          | The buffer composition is at the discretion of the manufacturer. |
| Handling Advice: | Avoid repeated freeze-thaw cycles.                               |
| Storage:         | -80 °C   |
| Storage Comment: | Store at -80°C.  |