

## Datasheet for ABIN7563693

# TMEM64 Protein (AA 1-381) (His tag)



### Overview

Quantity:	1 mg
Target:	TMEM64
Protein Characteristics:	AA 1-381
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TMEM64 protein is labelled with His tag.

#### **Product Details**

Purpose:	Custom-made recombinant Tmem64 Protein expressed in mammalian cells.
Sequence:	MRNPGGSLPH TLPRALQHAG RTGVVEQPGR WAPERTAGGD RSEDRLPRGG GASAAAAAA
	AAASGALLGA YLERHGLPAA SDLPAPAGAL AGGPGSGGGV VVGVAEVRNW RCCCLGSTCW
	CRSLVLVCVL AALCFASLAL VRRYLQHLLL WVESLDSLLG VLLFVVGFIV VSFPCGWGYI
	VLNVAAGYLY GFVLGMGLMV VGVLIGTFIA HVVCKRLLTA WVAARIQNSD KLSAVIRVVE
	GGSGLKVVAL ARLTPIPFGL QNAVFSITDV PLPSYLMASS AGLLPTQLLN SYLGTTLRTM
	EDVIAEQSLS GYFVFCLQIV ISIGLMFYVV HRAQVELNAA IVACEMELKT SLVKGNQSDP
	SGSSFYNKRT LTFSGGGINI V 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:

- · 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.

Purity:

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

Grade:

custom-made

TMENAGA

#### **Target Details**

larget:	I MEM64
Alternative Name:	Tmem64 (TMEM64 Products)
Background:	Transmembrane protein 64,FUNCTION: Positively regulates TNFSF11-induced osteoclast
	differentiation. Acts as a regulator of TNFSF11-mediated Ca(2+) signaling pathways via its
	interaction with SERCA2 which is critical for the TNFSF11-induced CREB1 activation and
	mitochondrial ROS generation necessary for proper osteoclast generation. Association
	between TMEM64 and SERCA2 in the ER leads to cytosolic Ca (2+) spiking for activation of
	NFATC1 and production of mitochondrial ROS, thereby triggering Ca (2+) signaling cascades
	that promote osteoclast differentiation and activation (PubMed:23395171). Negatively
	regulates osteoblast differentiation and positively regulates adipocyte differentiation via
	modulation of the canonical Wnt signaling pathway. Mediates the switch in lineage
	commitment to osteogenesis rather than to adipogenesis in mesenchymal stem cells by
	negatively regulating the expression, activity and nuclear localization of CTNNB1
	(PubMed:25979161). {ECO:0000269 PubMed:23395171, ECO:0000269 PubMed:25979161}.
Molecular Weight:	39.8 kDa
UniProt:	Q3U145

## **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
Handling	
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.
Expiry Date:	12 months