

# Datasheet for ABIN7555844 **TRPM8 Protein (AA 1-1104) (His tag)**



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Quantity:	1 mg
Target:	TRPM8
Protein Characteristics:	AA 1-1104
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TRPM8 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

## **Product Details**

Purpose:	Custom-made recombinat TRPM8 Protein expressed in mammalien cells.
Sequence:	MSFRAARLSM RNRRNDTLDS TRTLYSSASR STDLSYSESD LVNFIQANFK KRECVFFTKD
	SKATENVCKC GYAQSQHMEG TQINQSEKWN YKKHTKEFPT DAFGDIQFET LGKKGKYIRL
	SCDTDAEILY ELLTQHWHLK TPNLVISVTG GAKNFALKPR MRKIFSRLIY IAQSKGAWIL
	TGGTHYGLMK YIGEVVRDNT ISRSSEENIV AIGIAAWGMV SNRDTLIRNC DAEGYFLAQY
	LMDDFTRDPL YILDNNHTHL LLVDNGCHGH PTVEAKLRNQ LEKYISERTI QDSNYGGKIP
	IVCFAQGGGK ETLKAINTSI KNKIPCVVVE GSGQIADVIA SLVEVEDALT SSAVKEKLVR
	FLPRTVSRLP EEETESWIKW LKEILECSHL LTVIKMEEAG DEIVSNAISY ALYKAFSTSE
	QDKDNWNGQL KLLLEWNQLD LANDEIFTND RRWESADLQE VMFTALIKDR PKFVRLFLEN
	GLNLRKFLTH DVLTELFSNH FSTLVYRNLQ IAKNSYNDAL LTFVWKLVAN FRRGFRKEDR
	NGRDEMDIEL HDVSPITRHP LQALFIWAIL QNKKELSKVI WEQTRGCTLA ALGASKLLKT
	LAKVKNDINA AGESEELANE YETRAVELFT ECYSSDEDLA EQLLVYSCEA WGGSNCLELA

VEATDQHFIA QPGVQNFLSK QWYGEISRDT KNWKIILCLF IIPLVGCGFV SFRKKPVDKH
KKLLWYYVAF FTSPFVVFSW NVVFYIAFLL LFAYVLLMDF HSVPHPPELV LYSLVFVLFC
DEVRQWYVNG VNYFTDLWNV MDTLGLFYFI AGIVFRLHSS NKSSLYSGRV IFCLDYIIFT
LRLIHIFTVS RNLGPKIIML QRMLIDVFFF LFLFAVWMVA FGVARQGILR QNEQRWRWIF
RSVIYEPYLA MFGQVPSDVD GTTYDFAHCT FTGNESKPLC VELDEHNLPR FPEWITIPLV
CIYMLSTNIL LVNLLVAMFG YTVGTVQENN DQVWKFQRYF LVQEYCSRLN IPFPFIVFAY
FYMVVKKCFK CCCKEKNMES SVCCFKNEDN ETLAWEGVMK ENYLVKINTK ANDTSEEMRH
RFRQLDTKLN DLKGLLKEIA NKIK 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.

#### Characteristics:

Key Benefits:

- · Made to order protein from design to production by highly experienced protein experts.
- Protein expressed in mammalien 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, Western Blot

#### Grade:

custom-made

### **Target Details**

Target:	TRPM8
Alternative Name:	TRPM8 (TRPM8 Products)
Background:	Transient receptor potential cation channel subfamily M member 8 (Long transient receptor potential channel 6) (LTrpC-6) (LTrpC6) (Transient receptor potential p8) (Trp-p8),FUNCTION:
	Receptor-activated non-selective cation channel involved in detection of sensations such as

coolness, by being activated by cold temperature below 25 degrees Celsius. Activated by icilin, eucalyptol, menthol, cold and modulation of intracellular pH. Involved in menthol sensation. Permeable for monovalent cations sodium, potassium, and cesium and divalent cation calcium. Temperature sensing is tightly linked to voltage-dependent gating. Activated upon depolarization, changes in temperature resulting in graded shifts of its voltage-dependent activation curves. The chemical agonist menthol functions as a gating modifier, shifting activation curves towards physiological membrane potentials. Temperature sensitivity arises from a tenfold difference in the activation energies associated with voltage-dependent opening and closing. In prostate cancer cells, shows strong inward rectification and high calcium selectivity in contrast to its behavior in normal cells which is characterized by outward rectification and poor cationic selectivity. Plays a role in prostate cancer cell migration (PubMed:25559186). Isoform 2 and isoform 3 negatively regulate menthol- and cold-induced channel activity by stabilizing the closed state of the channel. {ECO:0000269|PubMed:15306801, ECO:0000269|PubMed:16174775,

ECO:0000269|PubMed:22128173, ECO:0000269|PubMed:25559186}.

Molecular Weight: 127.7 kDa

UniProt: Q7Z2W7

### **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.

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