

Datasheet for ABIN7555867
TRPM2 Protein (AA 1-1503) (His tag)



[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	TRPM2
Protein Characteristics:	AA 1-1503
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TRPM2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant TRPM2 Protein expressed in mammalian cells.
Sequence:	MEPSALRKAG SEQEEGFEG L PRRVTDLGMV SNLRRSNSSL FKSRLQCPF GNNDKQESLS SWIPENIKKK ECVYFVESSK LSDAGKVVCQ CGYTHEQHLE EATKPHTFQG TQWDPKKHVQ EMPTDAFGDI VFTGLSQVKV KYVRVSDTP SSVIYHLMTQ HWGLDVPNLL ISVTGGAKNF NMKPRLSIF RRGLVKVAQT TGAWIITGGS HTGVMKQVGE AVRDFSLSSS YKEGELITIG VATWGTVHRR EGLIHPTGSF PAEYILDEDG QGNLTCLDSN HSHFILVDDG THGQYGVEIP LRTRLEKFIS EQTKERGGVA IKIPIVCVVL EGGPGTLHTI DNATTNGTPC VVEGSGRVA DVIAQVANLP VSDITISLIQ QKLSVFFQEM FETFTESRIV EWTKKIQDIV RRRQLLTVFR EGKDGQQDVD VAILQALLKA SRSQDHFGHE NWDHQLKLAV AWRNRVDIARS EIFMDEWQWK PSDLHPTMTA ALISNKPEFV KLFLENGVL KEFVTWDTLL YLYENLDPSC LFHSLKQKVL VEDPERPACA PAAPRLQMHV VAQVRELLG DFTQPLYPRP RHNDRLRLLL PVPHVKLNQV GVSLRSLYKR SSGHVTFVTMD PIRDLLIWA I VQNRRELAGI IWAQSQDCIA AALACSKILK ELSKEEEDTD SSEMLALAE EYEHRAIGVF TECYRKDEER AQKLLTRVSE AWGKTTCLQL

ALEAKDMKFV SHGGIQAFLLT KVVWVWGLSVD NGLWRVTLCM LAFPLLLTGL ISFREKRLQD
VGTPAARARA FFTAPVVVFH LNILSYFAFL CLFAYVLMVD FQPVPSWCEC AIYLWLFSLV
CEEMRQLFYD PDECGLMKKA ALYFSDFWNK LDVGAILLFV AGLTCRLIPA TLYPGRVILS
LDFILFCLRL MHIFTISKTL GPKIIIVKRM MKDVFFFLFL LAVVWVSGV AKQAILIHNE
RRVDWLFRGA VYHSYLTIFG QIPGYIDGVN FNPEHCSPNG TDPYKPKCPE SDATQQRPAF
PEWLTVLLLC LYLLFTNILL LNLLIAMFNY TFQQVQEHTD QIWKFQRHDL IEEYHGRPAA
PPPFILLSHL QLFIKRVVLK TPAKRHKQLK NKLEKNEEAA LLSWEIYLKE NYLQNRQFQQ
KQRPEQKIED ISNKVDAMVD LLDLDPLKRS GSMEQRLASL EEQVAQTAQA LHWIVRTLRA
SGFSSEADVP TLASQKAAEE PDAEPGGRKK TEEPGRDYSYHV NARHLLYPNC PVTRFPVPNE
KVPWETEFLI YDPPFYTAER KDAAMDPMG DTLEPLSTIQ YNVVDGLRDR RSFHGPYTVQ
AGLPLNPMGR TGLRGRGSL S CFGPNHTLYP MVTRWRNRD GAICRKSICK MLEVLVVKLP
LSEHWALPGG SREPGEMLPK KLKRLRQEH WPSFENLLKC GMEVYKGYMD DPRNTDPAWI
ETVAVSVHFQ DQNDVELNRL NSNLHACDSG ASIRWQVDR RIPLYANHKT LLQKAAAEFG AHY

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

Target Details

Target: TRPM2

Alternative Name: TRPM2 ([TRPM2 Products](#))

Background: Transient receptor potential cation channel subfamily M member 2 (Estrogen-responsive element-associated gene 1 protein) (Long transient receptor potential channel 2) (LTrpC-2) (LTrpC2) (Transient receptor potential channel 7) (TrpC7) (Transient receptor potential melastatin 2),FUNCTION: [Isoform 1]: Nonselective, voltage-independent cation channel that mediates Na(+) and Ca(2+) influx, leading to increased cytoplasmic Ca(2+) levels (PubMed:11960981, PubMed:12594222, PubMed:11385575, PubMed:11509734, PubMed:11804595, PubMed:15561722, PubMed:16601673, PubMed:19171771, PubMed:20660597, PubMed:25620041, PubMed:27383051, PubMed:27068538, PubMed:28775320, PubMed:29745897, PubMed:30467180). Functions as a ligand-gated ion channel (PubMed:19171771, PubMed:25620041, PubMed:28775320, PubMed:30467180). Binding of ADP-ribose to the cytoplasmic Nudix domain causes a conformation change, the channel is primed but still requires Ca(2+) binding to trigger channel opening (PubMed:19171771, PubMed:25620041, PubMed:28775320, PubMed:29745897, PubMed:30467180). Extracellular calcium passes through the channel and increases channel activity (PubMed:19171771). Contributes to Ca(2+) release from intracellular stores in response to ADP-ribose (PubMed:19454650). Plays a role in numerous processes that involve signaling via intracellular Ca(2+) levels (Probable). Besides, mediates the release of lysosomal Zn(2+) stores in response to reactive oxygen species, leading to increased cytosolic Zn(2+) levels (PubMed:25562606, PubMed:27068538). Activated by moderate heat (35 to 40 degrees Celsius) (PubMed:16601673). Activated by intracellular ADP-ribose, beta-NAD (NAD(+)) and similar compounds, and by oxidative stress caused by reactive oxygen or nitrogen species (PubMed:11960981, PubMed:11385575, PubMed:11509734, PubMed:11804595, PubMed:15561722, PubMed:16601673, PubMed:19171771, PubMed:25620041, PubMed:27383051, PubMed:27068538, PubMed:30467180). The precise physiological activators are under debate, the true, physiological activators may be ADP-ribose and ADP-ribose-2'-phosphate (PubMed:20650899, PubMed:25918360). Activation by ADP-ribose and beta-NAD is strongly increased by moderate heat (35 to 40 degrees Celsius) (PubMed:16601673). Likewise, reactive oxygen species lower the threshold for activation by moderate heat (37 degrees Celsius) (PubMed:22493272). Plays a role in mediating behavioral and physiological responses to moderate heat and thereby contributes to body temperature homeostasis. Plays a role in insulin secretion, a process that requires increased cytoplasmic Ca(2+) levels (By similarity). Required for normal IFNG and cytokine secretion and normal innate immune immunity in response to bacterial infection. Required for normal phagocytosis

Target Details

and cytokine release by macrophages exposed to zymosan (in vitro). Plays a role in dendritic cell differentiation and maturation, and in dendritic cell chemotaxis via its role in regulating cytoplasmic Ca(2+) levels (By similarity). Plays a role in the regulation of the reorganization of the actin cytoskeleton and filopodia formation in response to reactive oxygen species via its role in increasing cytoplasmic Ca(2+) and Zn(2+) levels (PubMed:27068538). Confers susceptibility to cell death following oxidative stress (PubMed:12594222, PubMed:25562606). {ECO:0000250|UniProtKB:Q91YD4, ECO:0000269|PubMed:11385575, ECO:0000269|PubMed:11509734, ECO:0000269|PubMed:11804595, ECO:0000269|PubMed:11960981, ECO:0000269|PubMed:12594222, ECO:0000269|PubMed:15561722, ECO:0000269|PubMed:16601673, ECO:0000269|PubMed:19171771, ECO:0000269|PubMed:19454650, ECO:0000269|PubMed:20650899, ECO:0000269|PubMed:20660597, ECO:0000269|PubMed:22493272, ECO:0000269|PubMed:25562606, ECO:0000269|PubMed:25620041, ECO:0000269|PubMed:25918360, ECO:0000269|PubMed:27068538, ECO:0000269|PubMed:27383051, ECO:0000269|PubMed:28775320, ECO:0000269|PubMed:29745897, ECO:0000269|PubMed:30467180, ECO:0000305}, FUNCTION: [Isoform 2]: Lacks cation channel activity. Does not mediate cation transport in response to oxidative stress or ADP-ribose. {ECO:0000269|PubMed:11960981}, FUNCTION: [Isoform 3]: Lacks cation channel activity and negatively regulates the channel activity of isoform 1. Negatively regulates susceptibility to cell death in response to oxidative stress. {ECO:0000269|PubMed:12594222}.

Molecular Weight: 171.2 kDa

UniProt: [O94759](#)

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.

Handling

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months