Datasheet for ABIN7555868

TRPM4 Protein (AA 1-1214) (His tag)

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Overview

Quantity:	1 mg
Target:	TRPM4
Protein Characteristics:	AA 1-1214
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TRPM4 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant TRPM4 Protein expressed in mammalian cells.
Sequence:	MVVPEKEQSW IPKIFKKKTC TTFIVDSTDP GGTLCQCGRP RTAHPAVAME DAFGAAVVTV WDSDAHTTEK PTDAYGELDF TGAGRKHSNF LRLSDRTDPA AVYSLVTRTW GFRAPNLVVS VLGGSGGPVL QTWLQDLLRR GLVRAAQSTG AWIVTGGLHT GIGRHVGVAV RDHQMASTGG TKVVAMGVAP WGVVRNRDTL INPKGSFPAR YRWRGDPEDG VQFPLDYNYS AFFLVDDGTH GCLGGENRFR LRLESYISQQ KTGVGGTGID IPVLLLLIDG DEKMLTRIEN ATQAQLPCLL VAGSGGAADC LAETLEDTLA PGSGGARQGE ARDRIRRFFP KGDLEVLQAQ VERIMTRKEL LTVYSSEDGS EEFETIVLKA LVKACGSSEA SAYLDELRLA VAWNRVDIAQ SELFRGDIQW RSFHLEASLM DALLNDRPEF VRLLISHGLS LGHFLTPMRL AQLYSAAPSN SLIRNLLDQA SHSAGTKAPA LKGGAAELRP PDVGHVLRML LGKMCAPRYP SGGAWDPHPG QGFGESMYLL SDKATSPLSL DAGLGQAPWS DLLLWALLLN RAQMAMYFWE MGSNAVSSAL GACLLLRVMA RLEPDAEEAA RRKDLAFKFE GMGVDLFGEC YRSSEVRAAR LLLRRCPLWG DATCLQLAMQ ADARAFFAQD GVQSLLTQKW WGDMASTTPI WALVLAFFCP PLIYTRLITF RKSEEEPTRE

Product Details

	ELEFDMDSVI NGEGPVGTAD PAEKTPLGVP RQSGRPGCCG GRCGGRRCLR RWFHFWGAPV TIFMGNVVSY LLFLLLFSRV LLVDFQPAPP GSLELLLYFW AFTLLCEELR QGLSGGGGSL ASGGPGPGHA SLSQRLRLYL ADSWNQCDLV ALTCFLLGVG CRLTPGLYHL GRTVLCIDFM VFTVRLLHIF TVNKQLGPKI VIVSKMMKDV FFFLFFLGVW LVAYGVATEG LLRPRDSDFP SILRRVFYRP YLQIFGQIPQ EDMDVALMEH SNCSSEPGFW AHPPGAQAGT CVSQYANWLV VLLLVIFLLV ANILLVNLLI AMFSYTFGKV QGNSDLYWKA QRYRLIREFH SRPALAPPFI VISHLRLLLR QLCRRPRSPQ PSSPALEHFR VYLSKEAERK LLTWESVHKE NFLLARARDK RESDSERLKR TSQKVDLALK QLGHIREYEQ RLKVLEREVQ QCSRVLGWVA EALSRSALLP PGGPPPPDLP GSKD **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:	TRPM4
Alternative Name:	TRPM4 (TRPM4 Products)

Target Details

Background:	Transient receptor potential cation channel subfamily M member 4 (hTRPM4) (Calcium-activated non-selective cation channel 1) (Long transient receptor potential channel 4) (LTrpC-4) (LTrpC4) (Melastatin-4),FUNCTION: Calcium-activated non selective (CAN) cation channel that mediates membrane depolarization (PubMed:12015988, PubMed:29211723, PubMed:30528822). While it is activated by increase in intracellular Ca(2+), it is impermeable to it (PubMed:12015988). Mediates transport of monovalent cations (Na(+) > K(+) > Cs(+) > Li(+)), leading to depolarize the membrane. It thereby plays a central role in cadiomyocytes, neurons from entorhinal cortex, dorsal root and vomeronasal neurons, endocrine pancreas cells, kidney epithelial cells, cochlea hair cells etc. Participates in T-cell activation by modulating Ca(2+) oscillations after T lymphocyte activation, which is required for NFAT-dependent IL2 production. Involved in myogenic constriction of cerebral arteries. Controls insulin secretion in pancreatic beta-cells. May also be involved in pacemaking or could cause irregular electrical activity under conditions of Ca(2+) overload. Affects T-helper 1 (Th1) and T-helper 2 (Th2) cell motility and cytokine production through differential regulation of calcium signaling and NFATC1 localization. Enhances cell proliferation through up-regulation of the beta-catenin signaling pathway. Plays a role in keratinocyte differentiation (PubMed:30528822). {ECO:0000269|PubMed:11535825, ECO:0000269|PubMed:12015988, ECO:0000269|PubMed:12799367, ECO:0000269|PubMed:14758478, ECO:0000269|PubMed:15121803, ECO:0000269|PubMed:15331675, ECO:0000269|PubMed:15472118, ECO:0000269|PubMed:15550671, ECO:0000269|PubMed:15590641, ECO:0000269|PubMed:15845551, ECO:0000269|PubMed:16186107, ECO:0000269|PubMed:16407466, ECO:0000269|PubMed:16424899, ECO:0000269|PubMed:16806463, ECO:0000269|PubMed:20625999, ECO:0000269|PubMed:20656926, ECO:0000269|PubMed:29211723, ECO:0000269|PubMed:30528822}.
Molecular Weight:	134.3 kDa
UniProt:	Q8TD43
Pathways:	Regulation of Leukocyte Mediated Immunity, Production of Molecular Mediator of Immune Response

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