

Datasheet for ABIN7564194 **TRPM4 Protein (AA 1-1213) (His tag)**



Overview

Quantity:	1 mg
Target:	TRPM4
Protein Characteristics:	AA 1-1213
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TRPM4 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details	
Purpose:	Custom-made recombinat Trpm4 Protein expressed in mammalien cells.
Sequence:	MVGPEKEQSW IPKIFRKKVC TTFIVDLSDD AGGTLCQCGQ PRDAHPSVAV EDAFGAAVVT
	EWNSDEHTTE KPTDAYGDLD FTYSGRKHSN FLRLSDRTDP ATVYSLVTRS WGFRAPNLVV
	SVLGGSGGPV LQTWLQDLLR RGLVRAAQST GAWIVTGGLH TGIGRHVGVA VRDHQTASTG
	SSKVVAMGVA PWGVVRNRDM LINPKGSFPA RYRWRGDPED GVEFPLDYNY SAFFLVDDGT
	YGRLGGENRF RLRFESYVAQ QKTGVGGTGI DIPVLLLLID GDEKMLKRIE DATQAQLPCL
	LVAGSGGAAD CLVETLEDTL APGSGGLRRG EARDRIRRYF PKGDPEVLQA QVERIMTRKE
	LLTVYSSEDG SEEFETIVLR ALVKACGSSE ASAYLDELRL AVAWNRVDIA QSELFRGDIQ
	WRSFHLEASL MDALLNDRPE FVRLLISHGL SLGHFLTPVR LAQLYSAVSP NSLIRNLLDQ
	ASHASSSKSP PVNGTVELRP PNVGQVLRTL LGETCAPRYP ARNTRDSYLG QDHRENDSLL
	MDWANKQPST DASFEQAPWS DLLIWALLLN RAQMAIYFWE KGSNSVASAL GACLLLRVMA
	RLESEAEEAA RRKDLAATFE SMSVDLFGEC YHNSEERAAR LLLRRCPLWG EATCLQLAMQ

ADARAFFAQD GVQSLLTQKW WGEMDSTTPI WALLLAFFCP PLIYTNLIVF RKSEEEPTQK DLDFDMDSSI NGAGPPGTVE PSAKVALERR QRRRPGRALC CGKFSKRWSD FWGAPVTAFL GNVVSYLLFL LLFAHVLLVD FQPTKPSVSE LLLYFWAFTL LCEELRQGLG GGWGSLASGG RGPDRAPLRH RLHLYLSDTW NQCDLLALTC FLLGVGCRLT PGLFDLGRTV LCLDFMIFTL RLLHIFTVNK QLGPKIVIVS KMMKDVFFFL FFLCVWLVAY GVATEGILRP QDRSLPSILR RVFYRPYLQI FGQIPQEEMD VALMIPGNCS MERGSWAHPE GPVAGSCVSQ YANWLVVLLL IVFLLVANIL LLNLLIAMFS YTFSKVHGNS DLYWKAQRYS LIREFHSRPA LAPPLIIISH VRLLIKWLRR CRRCRRANLP ASPVFEHFRV CLSKEAERKL LTWESVHKEN FLLAQARDKR DSDSERLKRT SQKVDTALKQ LGQIREYDRR LRGLEREVQH CSRVLTWMAE ALSHSALLPP GAPPPPSPTG SKD 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:	TRPM4
Alternative Name:	Trpm4 (TRPM4 Products)
Background:	Transient receptor potential cation channel subfamily M member 4 (Calcium-activated non-

selective cation channel 1) (Long transient receptor potential channel 4) (LTrpC-4) (LTrpC4),FUNCTION: Calcium-activated non selective (CAN) cation channel that mediates membrane depolarization. While it is activated by increase in intracellular Ca(2+), it is impermeable to it (PubMed:17188667, PubMed:29211714). 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 (By similarity). Essential for the migration but not the maturation of dendritic cells (PubMed:18758465). Plays a role in keratinocyte differentiation (By similarity). {ECO:0000250|UniProtKB:Q8TD43, ECO:0000269|PubMed:17188667, ECO:0000269|PubMed:18758465, ECO:0000269|PubMed:29211714}.

Molecular Weight:	135.8 kDa
UniProt:	Q7TN37
Pathways:	Regulation of Leukocyte Mediated Immunity, Production of Molecular Mediator of Immune
	Response

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.

Handling

Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months