Datasheet for ABIN3136669

TRPM8 Protein (AA 1-1104) (rho-1D4 tag)

1 Image

Go to Product page

Overview

Quantity:	1 mg
Target:	TRPM8
Protein Characteristics:	AA 1-1104
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TRPM8 protein is labelled with rho-1D4 tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), Crystallization (Crys), ELISA

Product Details

Sequence:	MSFEGARLSM RSRRNGTMGS TRTLYSSVSR STDVSYSDSD LVNFIQANFK KRECVFFTRD SKAMENICKC GYAQSQHIEG TQINQNEKWN YKKHTKEFPT DAFGDIQFET LGKKGKYLRL SCDTDSETLY ELLTQHWHLK TPNLVISVTG GAKNFALKPR MRKIFSRLIY IAQSKGAWIL TGGTHYGLMK YIGEVVRDNT ISRNSEENIV AIGIAAWGMV SNRDTLIRSC DDEGHFSAQY IMDDFTRDPL YILDNNHTHL LLVDNGCHGH PTVEAKLRNQ LEKYISERTS QDSNYGGKIP IVCFAQGGGR ETLKAINTSV KSKIPCVVVE GSGQIADVIA SLVEVEDVLT SSMVKEKLVR FLPRTVSRLP EEEIESWIKW LKEILESSHL LTVIKMEEAG DEIVSNAISY ALYKAFSTNE QDKDNWNGQL KLLLEWNQLD LASDEIFTND RRWESADLQE VMFTALIKDR PKFVRLFLEN GLNLQKFLTN EVLTELFSTH FSTLVYRNLQ IAKNSYNDAL LTFVWKLVAN FRRSFWKEDR SSREDLDVEL HDASLTTRHP LQALFIWAIL QNKKELSKVI WEQTKGCTLA ALGASKLLKT LAKVKNDINA AGESEELANE YETRAVELFT ECYSNDEDLA EQLLVYSCEA WGGSNCLELA VEATDQHFIA QPGVQNFLSK QWYGEISRDT KNWKIILCLF IIPLVGCGLV SFRKKPIDKH

	KKLLWYYVAF FTSPFVVFSW NVVFYIAFLL LFAYVLLMDF HSVPHTPELI LYALVFVLFC DEVRQWYMNG VNYFTDLWNV MDTLGLFYFI AGIVFRLHSS NKSSLYSGRV IFCLDYIIFT LRLIHIFTVS RNLGPKIIML QRMLIDVFFF LFLFAVWMVA FGVARQGILR QNEQRWRWIF RSVIYEPYLA MFGQVPSDVD STTYDFSHCT FSGNESKPLC VELDEHNLPR FPEWITIPLV CIYMLSTNIL LVNLLVAMFG YTVGIVQENN DQVWKFQRYF LVQEYCNRLN IPFPFVVFAY FYMVVKKCFK CCCKEKNMES NACCFRNEDN ETLAWEGVMK ENYLVKINTK ANDNSEEMRH RFRQLDSKLN DLKSLLKEIA NNIK **Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**
Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Mouse Trpm8 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade. • 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 will ensure that you receive a correctly folded protein. 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. In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization). When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered. The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer. The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.
Purification:	Three step purification of membrane proteins expressed in baculovirus infected SF9 insect cells: 1. Membrane proteins are fractioned by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot. 2. The best performing detergent is used for solubilization and the proteins are purified via their

Product Details

	rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate fractions are analyzed by Western blot. 3. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatograph. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin-free.
Grade:	Crystallography grade

Target Details

Target:	TRPM8
Alternative Name:	Trpm8 (TRPM8 Products)
Background:	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 agonists 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. {ECO:0000269|PubMed:11893340, ECO:0000269|PubMed:15190109}.
Molecular Weight:	128.9 kDa Including tag.
UniProt:	Q8R4D5

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 gurantee though.
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher

Application Details

	molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value 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:	Unlimited (if stored properly)

Images

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process