

Datasheet for ABIN3116017

TRPM8 Protein (AA 1-1104) (Strep Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	TRPM8
Protein Characteristics:	AA 1-1104
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TRPM8 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Sequence:	MSFRAARLSM RNRRNDTLDSTRTLYSSASRSTDLSYSESLVNFIQANFKKRECVFFTKD SKATENVCKC GYAQSQHMEGTQINQSEKWN YKKHTKEFPTDAFGDIQFETLGKKKGKYIRL SCDTDAEILYELLTQHWHLKTPNLVISVTG GAKNFALKPRMRKIFSRLIYIAQSKGAWIL TGGTHYGLMKYIGEVVRDNTISRSEENIV AIGIAAWGMVSNRDTLIRNCDAEGYFLAQY LMDDFTRDPLYILDNNHHTLLVDNGCHGHPTEAKLRNQLEKYISERTIQDSNYGGKIP IVCFAQGGGKETLKAINTSINKKIPCVVVEGSGQIADVIALSVEVEDALTSSAVKEKLVR FLPRTVSRLPEEETESWIKWLKEILECSHL LTVIKMEEAGDEIVSNAISYALYKAFSTSE QDKDNWNGQLKLLLEWNQLDLANDEIFTNDRRWESADLQEVMTALIKDRPKFVRLFLEN GLNLRKFLTHDVLTELSFNHFSTLVYRNQLIAKNSYNDAL LTFVWKLVANFRRGFRKEDR NGRDEMDIELHDVSPITRHP LQALFIWAILQNKKELSKVIWEQTRGCTLAALGASKLLKT LAKVKNDINAGESEELANEYETRAVELFT ECVSSDEDLAEQLLVYSCEAWGGSNCLELA VEATDQHFIAPQGVQNFLSKQWYGEISRDTKNWKIILCLFIPLVGC GFVSFRKKPVVDKH
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KKLLWYYVAF FTSPFVFSW NVVFYIAFL LFAYVLLMDF HSVPHPELV LYSLVFVLC
DEVQRQWYVNG VNYFTDLWNV MDTLGLFYFI AGIVFRLHSS NKSSLYSGRV IFCLDYIIFT
LRLIHIFTVS RNLGPKIIML QRMLIDVFFF LFLFAVWMVA FGVARQGILR QNEQRWRWIF
RSVIYEPYLA MFGQVPSDVD GTTYDFAHCT FTGNESKPLC VELDEHNLPR FPEWITIPLV
CIYMLSTNIL LVNLLVAMFG YTVGTVQENN DQVWKQRYF LVQEYCSRLN IPFPFIVFAY
FYMVVKKCFK CCCKEKNMES SVCCFKNEDN ETLAWEGVMK ENYLVKINTK ANDTSEEMRH
RFRQLDTKLN DLKGLLKEIA NKIK

Sequence without tag. The proposed Strep-Tag is based on experience s 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 in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified by multi-step, protein-specific process to ensure correct folding and modification.
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

Product Details

- 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.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

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

Target Details

	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.
Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.</p> <p>During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!</p>
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)



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