

Datasheet for ABIN3116059

TRPM1 Protein (AA 1-1603) (Strep Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	TRPM1
Protein Characteristics:	AA 1-1603
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TRPM1 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Sequence:	MKDSNRCCCG QFTNQHIPPL PSATPSKNEE ESKQVETQPE KWSVAKHTQS YPTDSYGVLE FQGGGYSNKA MYIRVSYDTK PDSLLHLMVK DWQLELPKLL ISVHGGLQNF EMQPKLKQVF GKGLIKAAMT TGAWIFTGGV STGVISHVGD ALKDHSKSR GRVCAIGIAP WGIVENKEDL VGKDVTRVYQ TMSNPLSKLS VLNNSTHFI LADNGTLGKY GAEVKLRLL EKHSILQKIN TRLGQGVPLV GLVVEGGPNV VSIVLEYLQE EPIPVVICD GSGRASDILS FAHKYCEEGG IINESLREQL LVTIQKTFNY NKAQSHQLFA IIMECMKKKE LVTVFRMGSE GQQDIEMAIL TALLKGTNVS APDQLSLALA WNRVDIARSQ IFVFGPHWPP LGSLAPPTDS KATEKEKKPP MATTKGGRGK GKGGKKKGKVK EEVEEETDPR KIELLNWVNA LEQAMLDALV LDRVDFVKLL IENGVMQHF LTIPRLEELY NTRLGPPNTL HLLVRDVKKS NLPPDYHISL IDIGLVLEYL MGGAYRCNYT RKNFRTLNN LFGPKRPKAL KLLGMEDDEP PAKGKKKKKK KKEEIDIDV DDPAVSRFQY PFHELMVWAV LMKRQKMAVF LWQRGEESMA KALVACKLYK AMAHESSESD LVDDISQDLN NNSKDFGQLA LELLDQSYKH DEQIAMKLLT YELKNWSNST CLKLAVAAKH
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RDFIAHTCSQ MLLTDMWMGR LMRKNPGLK VIMGILLPPT ILFLEFRTYD DFSYQTSKEN
EDGKEKEEEN TDANADAGSR KGDEENEHKK QRSIPGTKI CEFYNAPIVK FWFYTISYLG
YLLLFNYVIL VRMDGWPSLQ EWIVISYIVS LALEKIREIL MSEPGLKSQK IKVWLQEYWN
ITDLVAISTF MIGAILRLQN QPYMGYGRVI YCVDIIFWYI RVLDFGVNK YLGPYVMMIG
KMMIDMLYFV VIMLVVLSF GVARQAILHP EEKPSWKLAR NIFYMPYWMI YGEVFADQID
LYAMEINPPC GENLYDEEGK RLPPCIPGAW LTPALMACYL LVANILLVNL LIAVFNNFTF
EVKSISNQVW KFQRYQLIMT FHDRPVLPPP MIILSHIYII IMRLSGRCRK KREGDQEERD
RGLKLFLSDE ELKRLHEFEE QCVQEHFREK EDEQQSSSDE RIRVTSERVE NMSMRLEEIN
ERETFMKTSL QTVDLRLAQL EELSNRMVNA LENLAGIDRS DLIQARSRAS SECEATYLLR
QSSINSADGY SLYRYHFNGE ELLFEDTSLS TSPGTGVRKK TCSFRIKEEK DVKTHLVPEC
QNSLHLSLGT STSATPDGSH LAVDDLKNAE ESKLGPDIGI SKEDDERQTD SKKEETISPS
LNKTDVIHGQ DKSDVQNTQL TVETTNIEGT ISYPLEETKI TRYFPDETIN ACKTMKSRSF
VYSRGRKLVG GVNQDVEYSS ITDQQLTTEW QCQVQKITRS HSTDIPYIVS EAAVQAEHKE
QFADMQDEHH VAEAIPIPR LSLTITDRNG MENLLSVKPD QTLGFPSLRS KSLHGHPRNV
KSIQGKLDRS GHASSVSSLV IVSGMTAEEK KVKKEKASTE TEC

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-

Product Details

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:

- 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:	TRPM1
Alternative Name:	TRPM1 (TRPM1 Products)
Background:	Transient receptor potential cation channel subfamily M member 1 (Long transient receptor potential channel 1) (LTrpC1) (Melastatin-1),FUNCTION: Forms nonselective divalent cation-conducting channels which mediate the influx of Na(+), Ca(2+), Mg(2+), Mn(2+), Ba(2+), and Ni(2+) into the cytoplasm, leading to membrane depolarization (PubMed:19436059, PubMed:21278253). Impermeable to zinc ions (PubMed:21278253). In addition, forms heteromultimeric ion channels with TRPM3 which are permeable for calcium and zinc ions (PubMed:21278253). Essential for the depolarizing photoresponse of retinal ON bipolar cells. It

Target Details

is part of the GRM6 signaling cascade. May play a role in metastasis suppression (By similarity). May act as a spontaneously active, calcium-permeable plasma membrane channel. {ECO:0000250, ECO:0000269|PubMed:11535825, ECO:0000269|PubMed:19436059, ECO:0000269|PubMed:19878917, ECO:0000269|PubMed:19896109, ECO:0000269|PubMed:21278253}.

Molecular Weight: 182.2 kDa

UniProt: [Q7Z4N2](#)

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