Datasheet for ABIN3137293

TRPM5 Protein (AA 1-1158) (Strep Tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	TRPM5
Protein Characteristics:	AA 1-1158
Origin:	Mouse
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TRPM5 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	MQTTQSSCPG SPPDTEDGWE PILCRGEINF GGSGKKRGKF VKVPSSVAPS VLFELLLTEW HLPAPNLVVS LVGEERPLAM KSWLRDVLRK GLVKAAQSTG AWILTSALHV GLARHVGQAV RDHSLASTST KIRVVAIGMA SLDRILHRQL LDGVHQKEDT PIHYPADEGN IQGPLCPLDS NLSHFILVES GALGSGNDGL TELQLSLEKH ISQQRTGYGG TSCIQIPVLC LLVNGDPNTL ERISRAVEQA APWLILAGSG GIADVLAALV SQPHLLVPQV AEKQFREKFP SECFSWEAIV HWTELLQNIA AHPHLLTVYD FEQEGSEDLD TVILKALVKA CKSHSQEAQD YLDELKLAVA WDRVDIAKSE IFNGDVEWKS CDLEEVMTDA LVSNKPDFVR LFVDSGADMA EFLTYGRLQQ LYHSVSPKSL LFELLQRKHE EGRLTLAGLG AQQARELPIG LPAFSLHEVS RVLKDFLHDA CRGFYQDGRR MEERGPPKRP AGQKWLPDLS RKSEDPWRDL FLWAVLQNRY EMATYFWAMG REGVAAALAA CKIIKEMSHL EKEAEVARTM REAKYEQLAL DLFSECYGNS EDRAFALLVR RNHSWSRTTC LHLATEADAK AFFAHDGVQA FLTKIWWGDM ATGTPILRLL GAFTCPALIY TNLISFSEDA PQRMDLEDLQ EPDSLDMEKS FLCSRGGQLE KLTEAPRAPG DLGPQAAFLL

TRWRKFWGAP VTVFLGNVVM YFAFLFLFTY VLLVDFRPPP QGPSGSEVTL YFWVFTLVLE EIRQGFFTDE DTHLVKKFTL YVEDNWNKCD MVAIFLFIVG VTCRMVPSVF EAGRTVLAID FMVFTLRLIH IFAIHKQLGP KIIIVERMMK DVFFFLFFLS VWLVAYGVTT QALLHPHDGR LEWIFRRVLY RPYLQIFGQI PLDEIDEARV NCSLHPLLLE SSASCPNLYA NWLVILLLVT FLLVTNVLLM NLLIAMFSYT FQVVQGNADM FWKFQRYHLI VEYHGRPALA PPFILLSHLS LVLKQVFRKE AQHKRQHLER DLPDPLDQKI ITWETVQKEN FLSTMEKRRR DSEGEVLRKT AHRVDLIAKY IGGLREQEKR IKCLESQANY CMLLLSSMTD TLAPGGTYSS SQNCGCRSQP ASARDREYLE SGLPPSDT

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!

Product Details

	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)

Target Details

Target:	TRPM5
Alternative Name:	Trpm5 (TRPM5 Products)
Background:	Transient receptor potential cation channel subfamily M member 5 (Long transient receptor potential channel 5) (LTrpC-5) (LTrpC5) (MLSN1- and TRP-related gene 1 protein),FUNCTION: Voltage-modulated Ca(2+)-activated, monovalent cation channel (VCAM) that mediates a transient membrane depolarization and plays a central role in taste transduction. Monovalent-specific, non-selective cation channel that mediates the transport of Na(+), K(+) and Cs(+) ions equally well. Activated directly by increases in intracellular Ca(2+), but is impermeable to it. Gating is voltage-dependent and displays rapid activation and deactivation kinetics upon channel stimulation even during sustained elevations in Ca(2+). Also activated by a fast intracellular Ca(2+) increase in response to inositol 1,4,5-triphosphate-producing receptor agonists. The channel is blocked by extracellular acidification. External acidification has 2 effects, a fast reversible block of the current and a slower irreversible enhancement of current inactivation. Is a highly temperature-sensitive, heat activated channel showing a steep increase of inward currents at temperatures between 15 and 35 degrees Celsius. Heat activation is due to a shift of the voltage-dependent activation curve to negative potentials. Activated by arachidonic acid in vitro. May be involved in perception of bitter, sweet and umami tastes. May

Target Details

	also be involved in sensing semiochemicals. {ECO:0000269|PubMed:12842017, ECO:0000269|PubMed:14657398, ECO:0000269|PubMed:15731110, ECO:0000269|PubMed:16355226, ECO:0000269|PubMed:16436689, ECO:0000269|PubMed:16935556, ECO:0000269|PubMed:17267604, ECO:0000269|PubMed:17522321}.
Molecular Weight:	130.8 kDa
UniProt:	Q9JJH7

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:	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!
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)