

Datasheet for ABIN3137354

TRPC4 Protein (AA 1-974) (Strep Tag)



[Go to Product page](#)

Overview

Quantity:	250 µg
Target:	TRPC4
Protein Characteristics:	AA 1-974
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TRPC4 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MAQFYKRNVPAPYRDRIPLRIVRAESELSPSEKAYLNAV EKGDYASVKK SLEEAEIYFK</p> <p>ININCIDPLGRTALLIAIENENLEIELLLSFNVYVGDALLHAIRKEVVGAVELLLNHKKPSGEKQVPPI</p> <p>LLDKQFSEFTPDITPIILAAHTNNYEIIKL VQKGVSVPRPHEVRCNCVECVSSSDVDSL</p> <p>RHSRSRLNIYKALASPSLIA LSSDPFLTA FQLSWELQELSKVENEFKSEYEELSRQCKQ</p> <p>FAKDLLDQTRSSRELEIILN YRDDNSLIEE QSGNDLARKLAIKYRQKEFVAQPNCQQLL</p> <p>ASRWYDEFPGWRRRHWA VKM VTCFIIGLLF PVFSVCYLIA PKSPGLGFIRKPFIKFICHT</p> <p>ASYLTFLFLL LLASQHIDRS DLNRQGPPT IVEWMILPWV LGFIWGEIKQ MWDGGLQDYI</p> <p>HDWWNLMDFV MNSLYLATIS LKIVAFVKYS ALNPRESWDM WHPTLVAEAL FAIANIFSSL</p> <p>RLISLFTANS HLGPLQISLG RMLLDILKFL FIYCLVLLAF ANGLNQLYFY YEETKGLSCK</p> <p>GIRCEKQNNAFSTLFETLQS LFWSIFGLIN LYVTNVKAQH EFTEFVGATM FGTYNVISLV</p> <p>VLLNMLIAMM NNSYQLIADH ADIEWKFART KLWMSYFEEG GTLPTPFNVI PSPKSLWYLV</p>

KWIWTHLCKK KMRRKPESFG TIGRRAADNL RRHHQYQEVN RNLVKRYVAA MIREAKTEEG
LTEENVKELK QDISSFRFEV LGLLRGSKLS TIQSANAASS ADSDEKSQSE GNGKDKRKNL
SLFDLTTLIH PRSAAIASER HNLSNGSALV VQEPPEKQR KVNFDVADIKN FGLFHRRSKQ
NAAEQNANQI FSVSEEITRQ QAAGALERNI ELESKGLASR GDRSIPGLNE QCVLVDHRER
NTDTLGLQVG KRVCSFKSE KVVVEDTVPI IPKEKHAHEE DSSIDYDLSP TDAAHEDYV TTRL

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 in one-step affinity chromatography
- 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 try to ensure that you receive soluble 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:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Product Details

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).
---------------	--

Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
---------	--

Grade:	custom-made
--------	-------------

Target Details

Target:	TRPC4
---------	-------

Alternative Name:	Trpc4 (TRPC4 Products)
-------------------	--

Background:	Short transient receptor potential channel 4 (TrpC4) (Capacitative calcium entry channel Trp4) (Receptor-activated cation channel TRP4),FUNCTION: Thought to form a receptor-activated non-selective calcium permeant cation channel. Probably is operated by a phosphatidylinositol second messenger system activated by receptor tyrosine kinases or G-protein coupled receptors. Acts as a cell-cell contact-dependent endothelial calcium entry channel. Has also been shown to be calcium-selective (By similarity). May also be activated by intracellular calcium store depletion. Trpc4 deficient mice lack a store-operated calcium entry in endothelial cells. {ECO:0000250, ECO:0000269 PubMed:11175743}.
-------------	--

Molecular Weight:	111.6 kDa
-------------------	-----------

UniProt:	Q9QUQ5
----------	------------------------

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</p>
----------	--

Application Details

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.
Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months