Datasheet for ABIN3118034

TRPV6 Protein (AA 1-765) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	TRPV6
Protein Characteristics:	AA 1-765
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TRPV6 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	MGPLQGDGGP ALGGADVAPR LSPVRVWPRP QAPKEPALHP MGLSLPKEKG LILCLWSKFC RWFQRRESWA QSRDEQNLLQ QKRIWESPLL LAAKDNDVQA LNKLLKYEDC KVHQRGAMGE TALHIAALYD NLEAAMVLME AAPELVFEPM TSELYEGQTA LHIAVVNQNM NLVRALLARR ASVSARATGT AFRRSPCNLI YFGEHPLSFA ACVNSEEIVR LLIEHGADIR AQDSLGNTVL HILILQPNKT FACQMYNLLL SYDRHGDHLQ PLDLVPNHQG LTPFKLAGVE GNTVMFQHLM QKRKHTQWTY GPLTSTLYDL TEIDSSGDEQ SLLELIITTK KREARQILDQ TPVKELVSLK WKRYGRPYFC MLGAIYLLYI ICFTMCCIYR PLKPRTNNRT SPRDNTLLQQ KLLQEAYMTP KDDIRLVGEL VTVIGAIIIL LVEVPDIFRM GVTRFFGQTI LGGPFHVLII TYAFMVLVTM VMRLISASGE VVPMSFALVL GWCNVMYFAR GFQMLGPFTI MIQKMIFGDL MRFCWLMAVV ILGFASAFYI IFQTEDPEEL GHFYDYPMAL FSTFELFLTI IDGPANYNVD LPFMYSITYA AFAIIATLLM LNLLIAMMGD THWRVAHERD ELWRAQIVAT TVMLERKLPR CLWPRSGICG REYGLGDRWF

LRVEDRQDLN RQRIQRYAQA FHTRGSEDLD KDSVEKLELG CPFSPHLSLP MPSVSRSTSR SSANWERLRQ GTLRRDLRGI INRGLEDGES WEYQI

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.

Purification:

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

Product Details

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

Target Details

Target:	TRPV6
Alternative Name:	TRPV6 (TRPV6 Products)
Background:	Transient receptor potential cation channel subfamily V member 6 (TrpV6) (CaT-like) (CaT-L) (Calcium transport protein 1) (CaT1) (Epithelial calcium channel 2) (ECaC2),FUNCTION: Calcium selective cation channel that mediates Ca(2+) uptake in various tissues, including the intestine (PubMed:11097838, PubMed:11278579, PubMed:11248124, PubMed:15184369, PubMed:23612980, PubMed:29258289). Important for normal Ca(2+) ion homeostasis in the body, including bone and skin (By similarity). The channel is activated by low internal calcium level, probably including intracellular calcium store depletion, and the current exhibits an inward rectification (PubMed:15184369). Inactivation includes both a rapid Ca(2+)-dependent and a slower Ca(2+)-calmodulin-dependent mechanism, the latter may be regulated by phosphorylation. In vitro, is slowly inhibited by Mg(2+) in a voltage-independent manner. Heteromeric assembly with TRPV5 seems to modify channel properties. TRPV5-TRPV6 heteromultimeric concatemers exhibit voltage-dependent gating. {ECO:0000250|UniProtKB:Q91WD2, ECO:0000269|PubMed:11097838, ECO:0000269|PubMed:11248124, ECO:0000269|PubMed:11278579, ECO:0000269|PubMed:15184369, ECO:0000269|PubMed:23612980, ECO:0000269|PubMed:29258289, ECO:0000269|PubMed:29861107}.
Molecular Weight:	87.3 kDa
UniProt:	Q9H1D0
Pathways:	TCR Signaling

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

Application Details

	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. 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