Datasheet for ABIN3118392

TRPV5 Protein (AA 1-729) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	TRPV5
Protein Characteristics:	AA 1-729
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TRPV5 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MGGFLPKAEG PGSQLQKLLP SFLVREQDWD QHLDKLHMLQ QKRILESPLL RASKENDLSV LRQLLLDCTC DVRQRGALGE TALHIAALYD NLEAALVLME AAPELVFEPT TCEAFAGQTA LHIAVVNQNV NLVRALLTRR ASVSARATGT AFRHSPRNLI YFGEHPLSFA ACVNSEEIVR LLIEHGADIR AQDSLGNTVL HILILQPNKT FACQMYNLLL SYDGHGDHLQ PLDLVPNHQG LTPFKLAGVE GNTVMFQHLM QKRRHIQWTY GPLTSILYDL TEIDSWGEEL SFLELVVSSD KREARQILEQ TPVKELVSFK WNKYGRPYFC ILAALYLLYM ICFTTCCVYR PLKFRGGNRT HSRDITILQQ KLLQEAYETR EDIIRLVGEL VSIVGAVIIL LLEIPDIFRV GASRYFGKTI LGGPFHVIII TYASLVLVTM VMRLTNTNGE VVPMSFALVL GWCSVMYFTR GFQMLGPFTI MIQKMIFGDL MRFCWLMAVV ILGFASAFYI IFQTEDPTSL GQFYDYPMAL FTTFELFLTV IDAPANYDVD LPFMFSIVNF AFTIIATLLM LNLFIAMMGD THWRVAQERD ELWRAQVVAT TVMLERKLPR CLWPRSGICG CEFGLGDRWF LRVENHNDQN PLRVLRYVEV FKNSDKEDDQ EHPSEKQPSG

	AESGTLARAS LALPTSSLSR TASQSSSHRG WEILRQNTLG HLNLGLNLSE GDGEEVYHF **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:	TRPV5
Alternative Name:	TRPV5 (TRPV5 Products)
Background:	Transient receptor potential cation channel subfamily V member 5 (TrpV5) (Calcium transport protein 2) (CaT2) (Epithelial calcium channel 1) (ECaC) (ECaC1) (Osm-9-like TRP channel 3) (OTRPC3),FUNCTION: Constitutively active calcium selective cation channel thought to be involved in Ca(2+) reabsorption in kidney and intestine (PubMed:11549322, PubMed:18768590). Required for normal Ca(2+) reabsorption in the kidney distal convoluted tubules (By similarity). The channel is activated by low internal calcium level and the current exhibits an inward rectification (PubMed:11549322, PubMed:18768590). A Ca(2+)-dependent feedback regulation includes fast channel inactivation and slow current decay (By similarity). Heteromeric assembly with TRPV6 seems to modify channel properties. TRPV5-TRPV6 heteromultimeric concatemers exhibit voltage-dependent gating (By similarity). {ECO:0000250|UniProtKB:P69744, ECO:0000250|UniProtKB:Q9XSM3, ECO:0000269|PubMed:11549322, ECO:0000269|PubMed:18768590}.
Molecular Weight:	82.6 kDa
UniProt:	Q9NQA5

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

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