Datasheet for ABIN3091860

GARP Protein (AA 1-1251) (Strep Tag)

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Overview

Quantity:	0.5 mg
Target:	GARP (CNGB1)
Protein Characteristics:	AA 1-1251
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GARP protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	MLGWVQRVLP QPPGTPRKTK MQEEEEVEPE PEMEAEVEPE PNPEEAETES ESMPPEESFK EEEVAVADPS PQETKEAALT STISLRAQGA EISEMNSPSR RVLTWLMKGV EKVIPQPVHS ITEDPAQILG HGSTGDTGCT DEPNEALEAQ DTRPGLRLLL WLEQNLERVL PQPPKSSEVW RDEPAVATGA ASDPAPPGRP QEMGPKLQAR ETPSLPTPIP LQPKEEPKEA PAPEPQPGSQ AQTSSLPPTR DPARLVAWVL HRLEMALPQP VLHGKIGEQE PDSPGICDVQ TISILPGGQV EPDLVLEEVE PPWEDAHQDV STSPQGTEVV PAYEEENKAV EKMPRELSRI EEEKEDEEEE EEEEEEEEEE EVTEVLLDSC VVSQVGVGQS EEDGTRPQST SDQKLWEEVG EEAKKEAEEK AKEEAEEVAE EEAEKEPQDW AETKEEPEAE AEAASSGVPA TKQHPEVQVE DTDADSCPLM AEENPPSTVL PPPSPAKSDT LIVPSSASGT HRKKLPSEDD EAEELKALSP AESPVVAWSD PTTPKDTDGQ DRAASTASTN SAIINDRLQE LVKLFKERTE KVKEKLIDPD VTSDEESPKP SPAKKAPEPA PDTKPAEAEP VEEEHYCDML CCKFKHRPWK KYQFPQSIDP LTNLMYVLWL FFVVMAWNWN CWLIPVRWAF PYQTPDNIHH WLLMDYLCDL IYFLDITVFQ TRLQFVRGGD

IITDKKDMRN NYLKSRRFKM DLLSLLPLDF LYLKVGVNPL LRLPRCLKYM AFFEFNSRLE SILSKAYVYR VIRTTAYLLY SLHLNSCLYY WASAYQGLGS THWVYDGVGN SYIRCYYFAV KTLITIGGLP DPKTLFEIVF QLLNYFTGVF AFSVMIGQMR DVVGAATAGQ TYYRSCMDST VKYMNFYKIP KSVQNRVKTW YEYTWHSQGM LDESELMVQL PDKMRLDLAI DVNYNIVSKV ALFQGCDRQM IFDMLKRLRS VVYLPNDYVC KKGEIGREMY IIQAGQVQVL GGPDGKSVLV TLKAGSVFGE ISLLAVGGGN RRTANVVAHG FTNLFILDKK DLNEILVHYP ESQKLLRKKA RRMLRSNNKP KEEKSVLILP PRAGTPKLFN AALAMTGKMG GKGAKGGKLA HLRARLKELA ALEAAAKQQE LVEQAKSSQD VKGEEGSAAP DQHTHPKEAA TDPPAPRTPP EPPGSPPSSP PPASLGRPEG EEEGPAEPEE HSVRICMSPG PEPGEQILSV KMPEEREEKA E

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:	GARP (CNGB1)
Alternative Name:	CNGB1 (CNGB1 Products)
Background:	Cyclic nucleotide-gated cation channel beta-1 (Cyclic nucleotide-gated cation channel 4) (CNG channel 4) (CNG-4) (CNG4) (Cyclic nucleotide-gated cation channel gamma) (Cyclic nucleotide-gated cation channel modulatory subunit) (Cyclic nucleotide-gated channel beta-1) (CNG channel beta-1) (Glutamic acid-rich protein) (GARP),FUNCTION: Subunit of cyclic nucleotide-gated (CNG) channels, nonselective cation channels, which play important roles in both visual and olfactory signal transduction. When associated with CNGA1, it is involved in the regulation of ion flow into the rod photoreceptor outer segment (ROS), in response to light-induced alteration of the levels of intracellular cGMP., FUNCTION: Isoform GARP2 is a high affinity rod photoreceptor phosphodiesterase (PDE6)-binding protein that modulates its catalytic properties: it is a regulator of spontaneous activation of rod PDE6, thereby serving to lower rod photoreceptor 'dark noise' and allowing these sensory cells to operate at the single photon detection limit.
Molecular Weight:	139.7 kDa

Target Details

UniProt:	Q14028
Pathways:	Regulation of G-Protein Coupled Receptor Protein Signaling, Phototransduction

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)

