

Datasheet for ABIN3099843

GPR18 Protein (AA 1-331) (Strep Tag)



Overview

Quantity:	250 μg
Target:	GPR18
Protein Characteristics:	AA 1-331
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GPR18 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details	
Brand:	AliCE®
Sequence:	MITLNNQDQP VPFNSSHPDE YKIAALVFYS CIFIIGLFVN ITALWVFSCT TKKRTTVTIY
	MMNVALVDLI FIMTLPFRMF YYAKDEWPFG EYFCQILGAL TVFYPSIALW LLAFISADRY
	MAIVQPKYAK ELKNTCKAVL ACVGVWIMTL TTTTPLLLLY KDPDKDSTPA TCLKISDIIY
	LKAVNVLNLT RLTFFFLIPL FIMIGCYLVI IHNLLHGRTS KLKPKVKEKS IRIIITLLVQ VLVCFMPFHI
	CFAFLMLGTG ENSYNPWGAF TTFLMNLSTC LDVILYYIVS KQFQARVISV MLYRNYLRSM
	RRKSFRSGSL RSLSNINSEM L
	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 posttranslational 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®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made
Target Details	
Target:	GPR18

Target Details

Alternative Name:	GPR18 (GPR18 Products)
Background:	N-arachidonyl glycine receptor (NAGly receptor) (G-protein coupled receptor 18),FUNCTION:
	Receptor for endocannabinoid N-arachidonyl glycine (NAGIy) (PubMed:16844083,
	PubMed:24762058, PubMed:27572937). However, conflicting results about the role of NAGly as
	an agonist are reported (PubMed:27018161). Can also be activated by plant-derived and
	synthetic cannabinoid agonists (PubMed:24762058). The activity of this receptor is mediated
	by G proteins which inhibit adenylyl cyclase (PubMed:16844083). May contribute to regulation
	of the immune system. Is required for normal homeostasis of CD8+ subsets of intraepithelial
	lymphocytes (IELs) (CD8alphaalpha and CD8alphabeta IELs)in small intstine by supporting
	preferential migration of CD8alphaalpha T-cells to intraepithelial compartment over lamina
	propria compartment, and by mediating their reconstitution into small intestine after bone
	marrow transplant (By similarity). Plays a role in hypotensive responses, mediating reduction in
	intraocular and blood pressure (By similarity). Mediates NAGly-induced process of
	reorganization of actin filaments and induction of acrosomal exocytosis (PubMed:27572937).
	{ECO:0000250 UniProtKB:Q8K1Z6, ECO:0000269 PubMed:16844083,
	ECO:0000269 PubMed:24762058, ECO:0000269 PubMed:27572937}.
Molecular Weight:	38.1 kDa
UniProt:	Q14330
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. 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