Datasheet for ABIN3121969

GPR183 Protein (AA 1-357) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	GPR183
Protein Characteristics:	AA 1-357
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GPR183 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MANNFTTPLA TSHGNNCDLY AHHSTARVLM PLHYSLVFII GLVGNLLALV VIVQNRKKIN STTLYSMNLV ISDILFTTAL PTRIAYYALG FDWRIGDALC RVTALVFYIN TYAGVNFMTC LSIDRFFAVV HPLRYNKIKR IEYAKGVCLS VWILVFAQTL PLLLTPMSKE EGDKTTCMEY PNFEGTASLP WILLGACLLG YVLPITVILL CYSQICCKLF RTAKQNPLTE KSGVNKKALN TIILIIVVFI LCFTPYHVAI IQHMIKMLCS PGALECGARH SFQISLHFTV CLMNFNCCMD PFIYFFACKG YKRKVMKMLK RQVSVSISSA VRSAPEENSR EMTESQMMIH SKASNGR **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:

Product Details

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

Target Details

Target:	GPR183

Target Details

Alternative Name:	Gpr183 (GPR183 Products)
Background:	G-protein coupled receptor 183 (Epstein-Barr virus-induced G-protein coupled receptor 2 homolog) (EBI2) (EBV-induced G-protein coupled receptor 2 homolog),FUNCTION: G-protein coupled receptor expressed in lymphocytes that acts as a chemotactic receptor for B-cells, T-cells, splenic dendritic cells, monocytes/macrophages and astrocytes (PubMed:19597478, PubMed:19615922, PubMed:21844396, PubMed:21796211, PubMed:21796212, PubMed:27147029). Receptor for oxysterol 7-alpha,25-dihydroxycholesterol (7-alpha,25-OHC) and other related oxysterols (PubMed:21796211, PubMed:21796212). Mediates cell positioning and movement of a number of cells by binding the 7-alpha,25-OHC ligand that forms a chemotactic gradient (PubMed:21796211, PubMed:21796212, PubMed:27147029). Binding of 7-alpha,25-OHC mediates the correct localization of B-cells during humoral immune responses (PubMed:21796211, PubMed:21796212). Collaborates with CXCR5 to mediate B-cell migration, probably by forming a heterodimer with CXCR5 that affects the interaction between of CXCL13 and CXCR5 (PubMed:21948984, PubMed:22913878). Guides B-cell movement along the B-cell zone-T-cell zone boundary and later to interfollicular and outer follicular regions (PubMed:19615922, PubMed:19597478, PubMed:21844396). Its specific expression during B-cell maturation helps position B-cells appropriately for mounting T-dependent antibody responses (PubMed:19615922). Also acts as a chemotactic receptor for some T-cells upon binding to 7-alpha,25-OHC ligand (PubMed:27147029). Promotes follicular helper T (Tfh) cells differentiation by positioning activated T-cells at the follicle-T-zone interface, promoting contact of newly activated CD4 T-cells with activated dendritic cells and exposing them to Tfh-cell-promoting inducible costimulator (ICOS) ligand (PubMed:27147029). Expression in splenic dendritic cells is required for their homeostasis, localization and ability to induce B- and T-cell responses: GPR183 acts as a chemotactic receptor in dendritic cells that mediates the accumulation of CD4(+) dendritic cells in bridging channels (PubMed:23682316, PubMed:23502855). Regulates migration of astrocytes and is involved in communication between astrocytes and macrophages (PubMed:25297897, PubMed:27166278). Promotes osteoclast precursor migration to bone surfaces (PubMed:26438360). Signals constitutively through G(i)-alpha, but not G(s)-alpha or G(q)-alpha (By similarity). Signals constitutively also via MAPK1/3 (ERK1/2) (By similarity). {ECO:0000250|UniProtKB:P32249, ECO:0000269|PubMed:19597478, ECO:0000269|PubMed:19615922, ECO:0000269|PubMed:21796211, ECO:0000269|PubMed:21796212, ECO:0000269|PubMed:21844396, ECO:0000269|PubMed:21948984, ECO:0000269|PubMed:22913878, ECO:0000269|PubMed:23502855, ECO:0000269|PubMed:23682316, ECO:0000269|PubMed:25297897,

Target Details

	ECO:0000269|PubMed:26438360, ECO:0000269|PubMed:27147029, ECO:0000269|PubMed:27166278}.
Molecular Weight:	40.2 kDa
UniProt:	Q3U6B2

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