

Datasheet for ABIN7557151

GPR183 Protein (AA 1-357) (His tag)



Overview

Quantity:	1 mg
Target:	GPR183
Protein Characteristics:	AA 1-357
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This GPR183 protein is labelled with His tag.

Product Details	
Purpose:	Custom-made recombinant Gpr183 Protein expressed in mammalian cells.
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 Purification-Tag is based on experiences 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.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:

- · Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

Target Details

Target:	GPR183
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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 Bcell 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-cellpromoting 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, ECO:0000269|PubMed:26438360, ECO:0000269|PubMed:27147029, ECO:0000269|PubMed:27166278}.

Molecular Weight:	40.2 kDa		
UniProt:	03U6B2		

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Application Details	
Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.

Handling

Handling Advice:	Avoid repeated freeze-thaw cycles.	
Storage:	-80 °C	
Storage Comment:	Store at -80°C.	
Expiry Date:	12 months	