

GPR183 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP55600

Specification

GPR183 Polyclonal Antibody - Product Information

Application WB, E
Primary Accession P32249

Reactivity
Host
Clonality
Calculated MW
Physical State

Rat, Pig, Dog, Bovine
Rabbit
Polyclonal
41 KDa
Liquid

Immunogen KLH conjugated synthetic peptide derived

laG

from human EBV Induced Gene 2

Epitope Specificity 201-300/361

Isotype Purity

affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cell membrane.

SIMILARITY Belongs to the G-protein coupled receptor

1 family.

Important Note

This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

Background Descriptions

Epstein-Barr virus-induced gene 2 is a 357 amino acid multi pass membrane protein. It is expressed in B-lymphocytes and lymphoid tissues and may function in the modulation of the immune system. Out of the nine genes that are induced by the Epstein-Barr virus, Ebi2 exhibits the highest levels of up-regulation. Ebi2 is a G-protein coupled receptor that signals through the G-protein G_{\square} . Ebi2 contains seven hydrophobic transmembrane regions and a putative N-linked glycosylation site at its extracellular N-terminus. Ebi2 is believed to be involved in regulating the effects of the Epstein-Barr virus on B-lymphocytes. In addition, Ebi2 may play a role mediating normal lymphocyte functions.

GPR183 Polyclonal Antibody - Additional Information

Gene ID 1880

Other Names

G-protein coupled receptor 183, Epstein-Barr virus-induced G-protein coupled receptor 2, EBI2, EBV-induced G-protein coupled receptor 2, hEBI2, GPR183 (HGNC:3128)

Target/Specificity



Tel: 858.875.1900 Fax: 858.875.1999

Expressed abundantly in lymphoid tissues such as spleen and lymph node, and in B- and T-lymphocytes. Also highly expressed in lung, heart and gastrointestinal tract, and weakly expressed in the urogenital system and brain.

Dilution

WB~~1:1000<br \><span class</pre> ="dilution E">E~~N/A

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

GPR183 Polyclonal Antibody - Protein Information

Name GPR183 (<u>HGNC:3128</u>)

Function

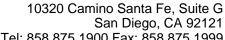
G-protein coupled receptor expressed in lymphocytes that acts as a chemotactic receptor for B-cells, T-cells, splenic dendritic cells, monocytes/macrophages and astrocytes (By similarity). Receptor for oxysterol 7-alpha,25-dihydroxycholesterol (7-alpha,25-OHC) and other related oxysterols (PubMed:21796212, PubMed:22875855, PubMed:22930711). Mediates cell positioning and movement of a number of cells by binding the 7-alpha,25-OHC ligand that forms a chemotactic gradient (By similarity). Binding of 7-alpha,25-OHC mediates the correct localization of B-cells during humoral immune responses (By similarity). Guides B-cell movement along the B-cell zone-T-cell zone boundary and later to interfollicular and outer follicular regions (By similarity). Its specific expression during B-cell maturation helps position B-cells appropriately for mounting T-dependent antibody responses (By similarity). 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: 22913878). Also acts as a chemotactic receptor for some T-cells upon binding to 7- alpha,25-OHC ligand (By similarity). 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 (By similarity). 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 (By similarity). Regulates migration of astrocytes and is involved in communication between astrocytes and macrophages (PubMed:25297897). Promotes osteoclast precursor migration to bone surfaces (By similarity). Signals constitutively through G(i)-alpha, but not G(s)-alpha or G(q)- alpha (PubMed: 21673108, PubMed:25297897). Signals constitutively also via MAPK1/3 (ERK1/2) (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

Expressed abundantly in lymphoid tissues such as spleen and lymph node, and in B- and T-lymphocytes (PubMed:16540462, PubMed:8383238). Also highly expressed in lung, heart and gastrointestinal tract, and weakly expressed in the urogenital system and brain (PubMed:16540462, PubMed:8383238). Expressed in astrocytes (PubMed:25297897).



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GPR183 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GPR183 Polyclonal Antibody - Images