10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GPR183 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55600

Specification

GPR183 Polyclonal Antibody - Product Information

Application	**WB, E**
Primary Accession	P32249
Reactivity	**Rat, Pig, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**41 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human EBV Induced Gene 2**
Epitope Specificity	**201-300/361**
Isotype	**IgG**

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□. 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

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 \>E~~N/A

Storage
Store at -20 ℃ 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 ℃.

GPR183 Polyclonal Antibody - Protein Information

Name GPR183 (HGNC:3128)

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).

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GPR183 Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GPR183 Polyclonal Antibody - Images