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GPR183 / EBI2 Antibody (Extracellular Domain)

Rabbit Polyclonal Antibody
Catalog # ALS10016

Specification

GPR183 / EBI2 Antibody (Extracellular Domain) - Product Information

Application	**IHC**
Primary Accession	P32249
Reactivity	**Human, Monkey**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**41kDa KDa**

GPR183 / EBI2 Antibody (Extracellular Domain) - 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, GPR183, EBI2

Target/Specificity
Human GPR183 / EBI2. BLAST analysis of the peptide immunogen showed no homology with other human proteins, except NBEA (39%).

Format
PBS, 0.1% Sodium Azide

Reconstitution & Storage
Long term: -70°C; Short term: +4°C

Precautions
GPR183 / EBI2 Antibody (Extracellular Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

GPR183 / EBI2 Antibody (Extracellular Domain) - 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).

Volume
Array

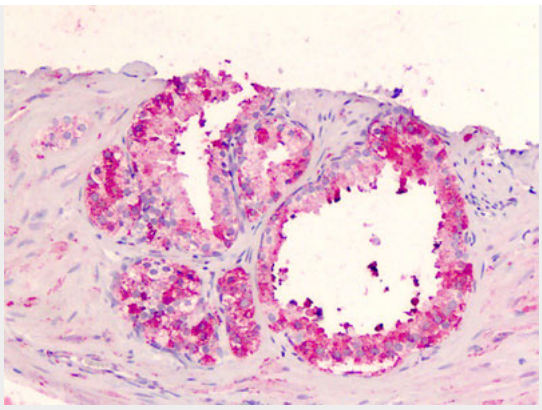
GPR183 / EBI2 Antibody (Extracellular Domain) - Protocols

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 / EBI2 Antibody (Extracellular Domain) - Images

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Human Prostate: Formalin-Fixed, Paraffin-Embedded (FFPE)

GPR183 / EBI2 Antibody (Extracellular Domain) - Background

Receptor for oxysterol 7-alpha,25-dihydroxycholesterol (7-alpha,25-OHC) and other related oxysterols. Binding of 7- alpha,25-OHC mediates the correct localization of B-cells during humoral immune responses. Promotes activated B-cell localization in the outer follicle and interfollicular regions. Its specific expression during B-cell maturation helps position B-cells appropriately for mounting T-dependent antibody responses (By similarity). Signals constitutively through G(i)-alpha, but not through G(s)-alpha or G(q)-alpha. Signals constitutively also via MAPK1/3 (ERK1/2).

GPR183 / EBI2 Antibody (Extracellular Domain) - References

Birkenbach M.P.,et al.J. Virol. 67:2209-2220(1993).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
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Dunham A.,et al.Nature 428:522-528(2004).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.