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GPR183 Antibody (internal region)

Peptide-affinity purified goat antibody
Catalog # AF3402a

Specification

GPR183 Antibody (internal region) - Product Information

Application	**IF, FC, Pep-ELISA**
Primary Accession	P32249
Other Accession	NP_004942.1, 1880, 321019 (mouse), 679975 (rat)
Predicted	**Human, Mouse, Rat, Rabbit**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5 mg/ml**
Isotype	**IgG**
Calculated MW	**41224**

GPR183 Antibody (internal region) - 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

Dilution
IF~~1:50~200
FC~~1:10~50
Pep-ELISA~~N/A

Format
0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
GPR183 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

GPR183 Antibody (internal region) - 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).

GPR183 Antibody (internal region) - 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 Antibody (internal region) - Images

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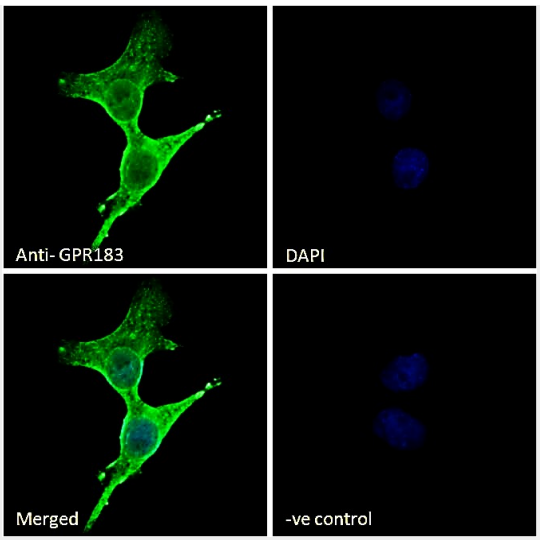
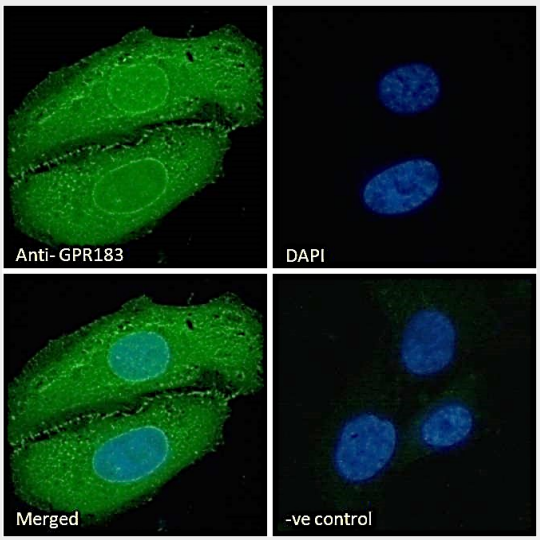


EB10541 Immunofluorescence analysis of paraformaldehyde fixed A431 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing membrane, cytoplasmic, and nuclear membrane stain



EB10541 Immunofluorescence analysis of paraformaldehyde fixed U2OS cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing nuclear membrane and vesicle staining. The nuclea

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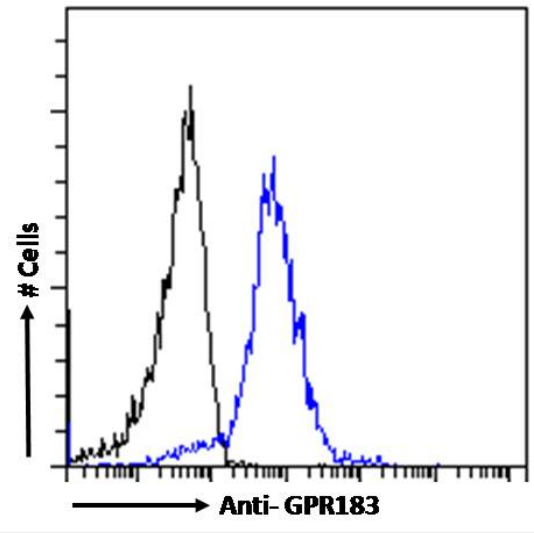

EB10107 Flow cytometric analysis of paraformaldehyde fixed A431 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) fol

GPR183 Antibody (internal region) - References

Structural motifs of importance for the constitutive activity of the orphan 7TM receptor EBI2: analysis of receptor activation in the absence of an agonist. Benned-Jensen T, Rosenkilde MM, Molecular pharmacology 2008 Oct 74 (4): 1008-21. PMID: 18628402