

## Product datasheet for RR213725L4V

## OriGene Technologies, Inc.

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## **Gpr183 (NM\_001109386) Rat Tagged ORF Clone Lentiviral Particle**

**Product data:** 

Product Type: Lentiviral Particles

**Product Name:** Gpr183 (NM\_001109386) Rat Tagged ORF Clone Lentiviral Particle

Symbol: Gpr183
Synonyms: Ebi2

Mammalian Cell Puromycin

Selection:

Vector:

pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM 001109386

ORF Size: 1071 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RR213725).

Sequence:

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This

naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**RefSeq:** <u>NM 001109386.1, NP 001102856.1</u>

RefSeq Size: 1536 bp
RefSeq ORF: 1074 bp
Locus ID: 679975
UniProt ID: D4A7K7

Cytogenetics: 15q25





## **Gene Summary:**

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 (By similarity). 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 (By similarity). 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 Tfhcell-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 (By similarity). Promotes osteoclast precursor migration to bone surfaces (By similarity). 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).[UniProtKB/Swiss-Prot Function]