

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Product datasheet for MR205447L3V

Gpr183 (NM_183031) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Gpr183 (NM_183031) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Gpr183
Synonyms:	Ebi2
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_183031
ORF Size:	1074 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR205447).
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 clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <u>More info</u>
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 183031.2</u>
RefSeq Size:	2942 bp
RefSeq ORF:	1074 bp
Locus ID:	321019
UniProt ID:	<u>Q3U6B2</u>
Cytogenetics:	14 E5



This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2022 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

Gpr183 (NM_183031) Mouse Tagged ORF Clone Lentiviral Particle - MR205447L3V

G-protein coupled receptor expressed in lymphocytes that acts as a chemotactic receptor for Gene Summary: B-cells, T-cells, splenic dendritic cells, monocytes/macrophages and astrocytes (PubMed:19597478, PubMed:19615922, PubMed:21844396, PubMed:21796211, PubMed:21796212, PubMed:27147029). Receptor for oxysterol 7-alpha,25dihydroxycholesterol (7-alpha,25-OHC) and other related oxysterols (PubMed:21796211, PubMed:21796212). Mediates cell positioning and movement of a number of cells by binding the 7-alpha,25-OHC ligand that forms a chemotactic gradient (PubMed:21796211, PubMed:21796212, PubMed:27147029). Binding of 7-alpha,25-OHC mediates the correct localization of B-cells during humoral immune responses (PubMed:21796211, PubMed:21796212). 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:21948984, PubMed:22913878). Guides B-cell movement along the B-cell zone-T-cell zone boundary and later to interfollicular and outer follicular regions (PubMed:19615922, PubMed:19597478, PubMed:21844396). Its specific expression during B-cell maturation helps position B-cells appropriately for mounting T-dependent antibody responses (PubMed:19615922). Also acts as a chemotactic receptor for some T-cells upon binding to 7alpha,25-OHC ligand (PubMed:27147029). 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 (PubMed:27147029). 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 (PubMed:23682316, PubMed:23502855). Regulates migration of astrocytes and is involved in communication between astrocytes and macrophages (PubMed:25297897, PubMed:27166278). Promotes osteoclast precursor migration to bone surfaces (PubMed:26438360). 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]

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2022 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US