

Product datasheet for MR205447L4

Gpr183 (NM_183031) Mouse Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gpr183 (NM_183031) Mouse Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	Gpr183
Synonyms:	Ebi2
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR205447).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF.

ACCN:	NM_183031
ORF Size:	1071 bp



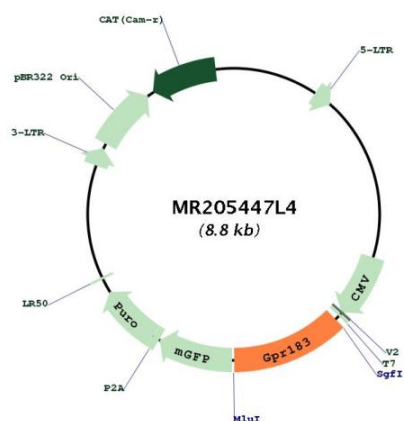
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OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), 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. 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.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none"> 1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_183031.2
RefSeq Size:	2942 bp
RefSeq ORF:	1074 bp
Locus ID:	321019
UniProt ID:	Q3U6B2
Cytogenetics:	14 E5

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 (PubMed:19597478, PubMed:19615922, PubMed:21844396, PubMed:21796211, PubMed:21796212, PubMed:27147029). Receptor for oxysterol 7-alpha,25-dihydroxycholesterol (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 7-alpha,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 Tfh-cell-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]

Product images:



Circular map for MR205447L4