

## Product datasheet for **MC204734**

### Gpr183 (NM\_183031) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Gpr183 (NM\_183031) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Gpr183  
**Synonyms:** Ebi2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** PCMV6-Kan/Neo (PCMV6KN)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Fully Sequenced ORF:** >BC052868

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AAGAGGTAATCCACTGCCACAACGGAGGTCTAGCCACCTTCTGATATTGACTGTGACCACTGGATACAG
AAATGGCTAACAAATTTCACTACCCCACTGGCAACGTCTCATGGCAATAACTGTGATCTCTATGCCACCA
CAGCACAGCCAGGTATTAATGCCTCTGCATTACAGCCTGGTCTTCATCATTGGGCTGGTGGGAAACCTG
CTGGCCTTGGTTGTCAATTGTTCAAAACAGAAAAAATCAACTCAACCACTCTCTATTCAATGAACCTGG
TCATTTCTGACATCCTGTTTACCACAGCTTTACCACTCGGATAGCCTACTATGCGCTGGGCTTTGATTG
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TTCATGACTTGTGAGCATAGACCGCTTCTTCGCTGTGGTGCACCCTCTGCGCTACAACAAGATTAATA
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CCTCACCCCTATGTCTAAGGAGGAGGGAGACAAGACCCTTGCATGGAGTATCCAACTTTGAAGGGACA
GCGTCCCTGCCGTGGATTCTGCTCGGAGCCTGTCTGCTGGGCTACGTGCTGCCTATCACAGTCATTCTCC
TGTGTTACTCTCAGATCTGCTGCAAACCTTTCAGGACTGCCAAGCAGAACCCTCACCGAGAAATCTGG
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CGCCCACCGACTGGTCCGCTCCCAACCAGGATGCCTTCCACTGCCGCCCCACCGCCAATGCACTGAGAT
CCAGACCAGATCGAGGAGACAAAAAAGCAAGTTCAACTTCATAAATGAAATATAATGTATATAAAGGAAG
GCCCTCATAAGTCTCAATGTAAAAAGAAATTTCTTGTGAAATTAATTTCTTGTCAATAGTTTGGCAAA
AGACGACTAATTGCACTGTATATTGCCAGTGTAATAATGTTAATACTGTAATATATGAATATATTTCTTA
ATTTAAAAAAGGCTCTCAACACAATATCCTCATCATTGTCTGTTTCACTGTGCTTACGCCCCAC
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**Restriction Sites:** RsrII-NotI  
**ACCN:** NM\_183031



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<b>Insert Size:</b>	1074 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">BC052868</a></u> , <u><a href="#">AAH52868</a></u>
<b>RefSeq Size:</b>	1493 bp
<b>RefSeq ORF:</b>	1074 bp
<b>Locus ID:</b>	321019
<b>UniProt ID:</b>	<u><a href="#">Q3U6B2</a></u>
<b>Cytogenetics:</b>	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]