

**MULTISCREEN™ MEMBRANE PREPARATION  
HUMAN RECOMBINANT S1P1 RECEPTOR**

**Data sheet**

**PRODUCT INFORMATION**

**Catalog Number:** MCG1047-1

**Lot Number:** MCG1047-1-09062011

**Quantity:** 1 vial (7.6mg/ml, 50uL)

**Host cell:** CHO-K1 Gaqi5

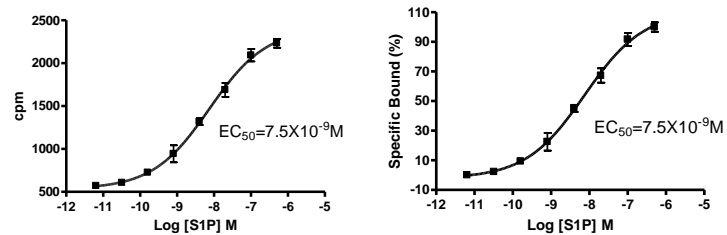
**Transfection:** Expression vector containing full-length human S1P1 cDNA (GenBank Accession Number NM\_001400) with FLAG tag sequence at N-terminus

**Recommended Storage:** Liquid nitrogen

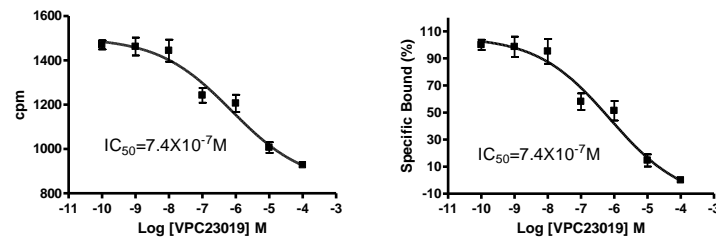
**Background:** S1P1 (or EDG1) is a widely distributed G-protein-coupled receptor for sphingosine-1-phosphate (S1P), a blood-borne bioactive lipid. Stimulation of the S1P1 receptor triggers a G-linked pathway, leading to growth, survival, migration, and morphogenesis. Disruption of the S1P1 gene in mice results in embryonic lethality because of its key role within endothelial cells in regulating the coverage of blood vessels by vascular smooth muscle cells. S1P1 also mediates activation of Rac and functions as a typical chemotactic receptor.

**Application:** [<sup>35</sup>S]GTPγS Binding Assay

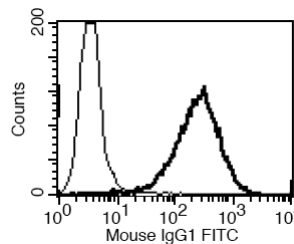
**Figure 1**



**Figure 2**



**Figure 3**



**Figure 1.** Dose-dependent [<sup>35</sup>S]GTPγS Binding to S1P1 membrane upon treatment with agonist using homogenous proximity assay method. **Figure 2.** Dose-dependent inhibition [<sup>35</sup>S]GTPγS Binding upon treatment with antagonist. **Figure 3.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

**References:**

Takuwa *et al.* (2001) Subtype-specific, differential activities of the EDG family receptors for sphingosine-1-phosphate, a novel lysophospholipid mediator. *Mol Cell Endocrinol* 177:3-11.

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