

MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT S1P5 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: CG1054-1

Lot Number: CG1054-1-013009

Quantity: 1 vial (2×10^6) frozen cells

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: CHO-K1 Gαq5

Transfection: Expression vector containing full-length human S1P5 cDNA (GenBank Accession Number: NM_030760) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM/F12, 10% FBS, 250 µg/mL hygromycin, 10 µg/mL puromycin

Stability: Stable in culture for minimum of two months

Background: The lysosphingolipid sphingosine 1-phosphate (S1P) regulates cell proliferation, apoptosis, motility, and neurite retractions. S1P and the structurally related LPA signal cells through a set of G-protein-coupled receptors known as EDG receptors. S1P5 or EDG8 is a 400-amino acid 7 transmembrane protein that shares 42-49% amino acid identity with the human S1P receptors EDG1, EDG3, and EDG5. Northern blot analysis has shown widespread expression of EDG8 in rat tissues, with strongest expression in spleen and white matter tracts of the brain.

Application: Functional assay

Figure 1

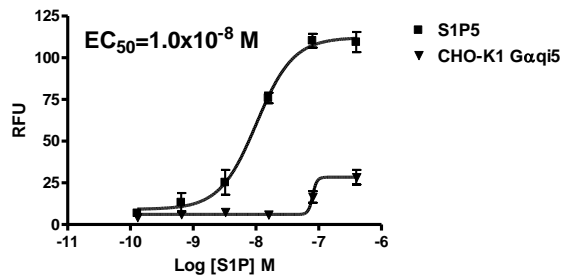


Figure 2

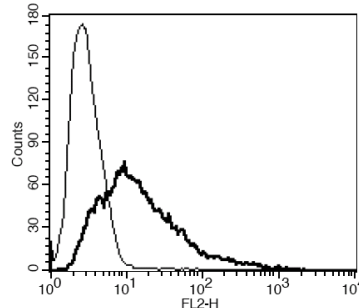


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01).

Figure 2. 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:

IM *et al.* (2000) Characterization of a novel phingosine 1-phosphate receptor, Edg-8. *J Biol Chem* 275:14281-14286.

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