

MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT S1P2 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: C1051-1

Lot Number: C1051-1-032116

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

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: CHO-K1

Transfection: Expression vector containing full-length human S1P2 cDNA (Genbank Accession Number: NM_004230) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM/F12, 10% FBS, 10 μ g/mL puromycin

Stability: In progress

Background: DG-5 (Endothelial Differentiation Gene) is a member of G protein coupled sphingosine-1-phosphate receptor family, which includes S1P1 (EDG-1), S1P2 (EDG-5/H218/AGR16), S1P3 (EDG-3), S1P4 (EDG-6), and S1P5 (EDG-8/NRG-1). Sphingosine-1-phosphate (SPP) is a bioactive lipid produced from the metabolism of sphingomyelin. It is an important constituent of serum and regulates cell growth, survival, migration, differentiation and gene expression via its interaction with the S1P family of G-protein coupled receptors. EDG-5 couple to a variety of G proteins i.e. Gi, Gq, G12, and G13 to activate extracellular signal-regulated kinase and mobilize Ca²⁺ and activate Elk-1- and serum-response factor (SRF)-driven gene transcription. Recent data suggest that EDG-5 also regulates Rho/Rho kinase pathway to inhibit tumor cell migration

Application: Functional assay

Figure 1

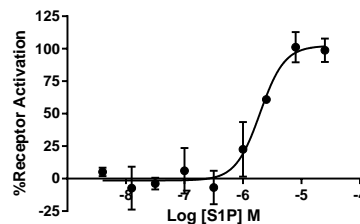


Figure 2

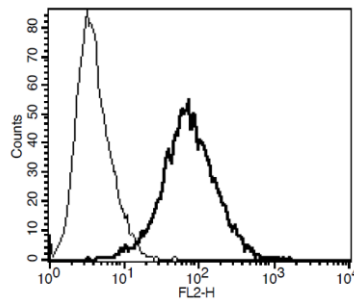


Figure 1. Dose-dependent stimulation of intracellular cAMP accumulation upon treatment with ligand, measured with Multiscreen™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: 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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