



MULTISPAN

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HUMAN RECOMBINANT S1P5 RECEPTOR MULTISCREEN™ DIVISION-ARRESTED CELL LINE

Data sheet

PRODUCT INFORMATION

Catalog Number: DC1054-1

Lot Number: DC1054-1-102022

Quantity: 1 vial (4 x 10⁶) frozen cells

Freeze Medium: Cell Banker 2
(Amsbio)

Host cell: CHO-K1

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, 10% FBS

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. Recent studies reported the role of S1P5 in renal inflammation and fibrosis. Moreover, S1PR5 plays a critical role in T cell infiltration and emigration from peripheral organs, as well as being specifically downregulated in TRM cells.

Application: Functional assay

Figure 1

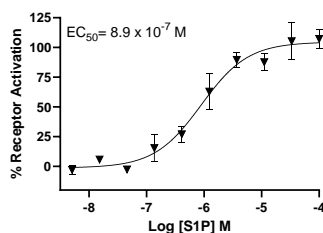


Figure 1. Dose-dependent inhibition of forskolin-stimulated intracellular cAMP accumulation upon treatment with ligand, measured with MULTISCREEN™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01).

References:

Schira-Heinen *et al.* (2022). Modulation of Specific Sphingosine-1-Phosphate Receptors Augments a Repair Mediating Schwann Cell Phenotype. *Int J Mol Sci.* 2022 Sep 7;23(18):10311.

Evrard *et al.* (2021). Sphingosine 1-phosphate receptor 5 (S1PR5) regulates the peripheral retention of tissue-resident lymphocytes. *J Exp Med.* 2022 Jan 3;219(1):e20210116.

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

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