MULTISCREEN™ STABLE CELL LINE
HUMAN RECOMBINANT EBI2 RECEPTOR

PRODUCT INFORMATION

Catalog Number: CG1242-1

Lot Number: CG1242-1-042814

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

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: CHO-K1 Gαqi5

Transfection: Expression vector containing full-length human EBI2 cDNA (GenBank Accession Number NM_004951) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

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

Stability: Stable in culture for minimum of two months

Data Sheet

Background: Epstein-Barr virus-induced gene 2 (EBI2, also known as GPR183) is a GPCR required for humoral immune responses and polymorphisms have been associated with inflammatory autoimmune diseases. It is expressed in B-lymphocyte cell lines as well as lymphoid tissues but not T-lymphocyte cell lines or peripheral blood T-lymphocytes. 7ļ,25-dihydroxycholesterol (7ļ,25-OHC) and other oxysterols act as chemoattractants for immune cells expressing EBI2 by directing cell migration. Mice deficient in cholesterol 25-hydroxylase (CH25H, required for generation of 7ļ,25-OHC) fail to generate EBI2 biological activity in vivo and shows that the EBI2-oxysterol signaling pathway plays an important role in the adaptive immune response.

Application: Functional assays

Figure 1

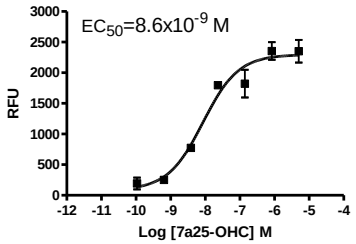

Figure 2

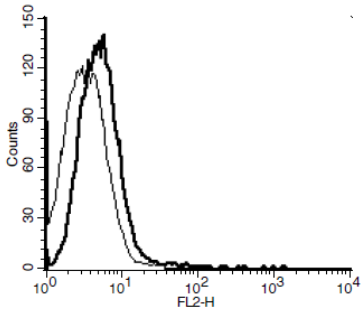

Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-MOR antibody. Thin line: Cells stained with secondary antibody only; Thick line: Cells stained with primary and secondary antibody.

References:

Chen *et al*. (1993) Molecular cloning and functional expression of a mu-opioid receptor from rat brain. *Mol Pharmacol* 44:8-12.

Contet *et al*. (2004) Mu opioid receptor: a gateway to drug addiction. *Curr Opin Neurobiol* 14:370-378.

Philippe *et al*. (2003) Anti-inflammatory properties of the mu opioid receptor support its use in the treatment of colon inflammation. *J Clin Invest* 111:1329-1338.

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