MULTISCREEN™ β-ARRESTIN2 STABLE CELL LINE HUMAN RECOMBINANT GPR35 T108M RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: CA1524-1

Lot Number: CA1524-1-032819

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

Freeze Medium: Cellbanker 2 (Amsbio 11891)

Host cell: CHO-K1

Transfection: Expression vector containing full-length human GPR35 cDNA (GenBank Accession Number NM_001195381.1 with T108M mutation) with FLAG tag sequence at N-terminus and ARRB2 cDNA (GenBank Accession Number NM_004313.3)

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM/F12, 10% FBS, 10 μg/mL puromycin, 800 μg/mL G418

Stability: In progress

Background: GPR35 is an orphan receptor and expressed in various tissues including stomach, gastrointestinal tissues, and several types of immune cells. Up-regulation of GPR35 has been found in human mast cells upon stimulation with IgE antibodies, human macrophages treated with the environmental contaminant polycyclic aromatic hydrocarbon benzo[a]pyrene, failing heart cells, and gastric cancer cells. Known agonists of the orphan receptor GPR35 are kynurenic acid, zaprinast, 5-nitro-2-(3-phenylproplyamino) benzoic acid, and lysophosphatidic acids.

Application: Functional assays

Figure 1

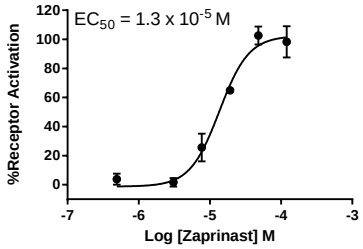

Figure 2

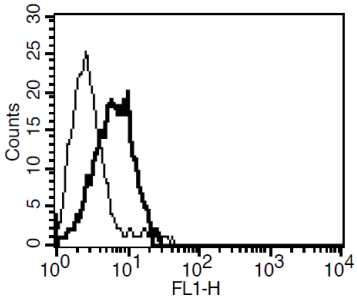

Figure 1. Dose-dependent inhibition of forskolin-stimulated intracellular cAMP accumulation upon treatment with ligand, measured with Multiscreen™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG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

References:

Wang JH *et al*. (2006) Kynurenic Acid as a Ligand for Orphan G Protein-coupled Receptor GPR35. *J Biol Chem* 281:22021-22028.

MacKenzie1, AE*, et al*. (2011) GPR35 as a novel therapeutic target. *Frontiers in Endocrinology,* 2:1-10.

Zhao PW, *et al*. (2010) Targeting of the Orphan Receptor GPR35 by Pamoic Acid: A Potent Activator of Extracellular Signal-Regulated Kinase and beta-Arrestin2 with Antinociceptive Activity. *Mol Pharm* 78:560–568.

FOR RESEARCH USE ONLY.

26219 Eden Landing Road, Hayward, California 94545-3718 Phone: (510) 887-0817 info@multispaninc.com