

**MULTISCREEN™ STABLE CELL LINE
HUMAN RECOMBINANT GPR55 RECEPTOR**

Data sheet

PRODUCT INFORMATION

Catalog Number: C1113b

Lot Number: C1113b-051310

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

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: HEK293T

Transfection: Full-length Human GPR55 cDNA (GenBank Accession Number NM_005683.3) with FLAG-tag sequence at the N-terminus

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM, 10% FBS, 1 μ g/mL puromycin

Stability: Stable in culture for minimum of two months

Background: GPR55 is a putative cannabinoid receptor. Its gene was mapped to chromosome 2q37, using fluorescence in situ hybridization (FISH), and its mRNA transcripts have been detected in the caudate nucleus and putamen. Recently, GPR55 was identified as a receptor for the bioactive lipid lysophosphatidylinositol (LPI).

Application: Functional assays

Figure 1

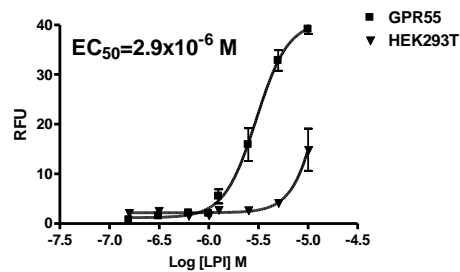


Figure 2

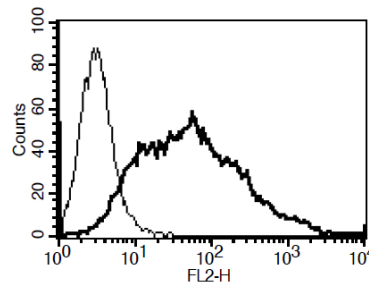


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01).

Figure 2. Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

References:

Sawzdargo *et al.* (1999). Identification and cloning of three novel human G protein-coupled receptor genes GPR52, PsiGPR53 and GPR55: GPR55 is extensively expressed in human brain. *Brain Res Mol Brain Res* 64:193-198.

Oka *et al.* (2007) Identification of GPR55 as a lysophosphatidylinositol receptor. *Biochem Biophys Res Commun* 362:928-934.

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