

MULTISCREEN™ STABLE CELL LINE
HUMAN RECOMBINANT GPBAR1 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: C1361-1a

Lot Number: C1361-1a-090911

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 GPBAR1 cDNA (GenBank Accession Number NM_170699) 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: The G protein-coupled bile acid receptor GPBAR1 (or GPR131) mediates bile acids-induced rapid elevation of intracellular cAMP levels. It is implicated in the suppression of macrophage functions and regulation of energy homeostasis by bile acids.

Application: Functional assays

Figure 1

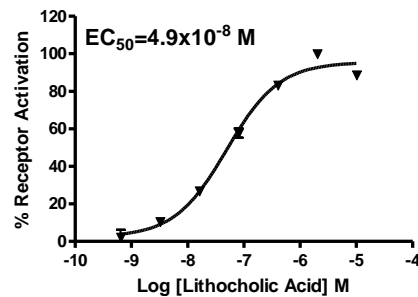


Figure 2

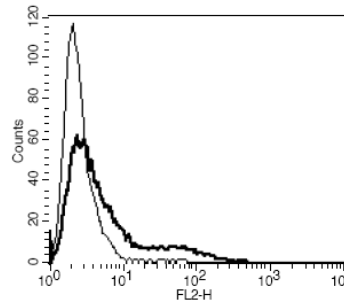


Figure 1. Dose-dependent increase of intracellular cAMP upon treatment with ligand, measured with Multiscreen™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells;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

References:

Maruyama *et al.* (2002) Identification of membrane-type receptor for bile acids (M-BAR). *Biochem Biophys Res Commun* 298:714-719.

Katsuma *et al.* (2005) Bile acids promote glucagon-like peptide-1 secretion through TGR5 in a murine enteroendocrine cell line STC-1. *Biochem Biophys Res Commun* 329:386-390.

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