

## MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT GPBAR1 RECEPTOR

### Data sheet

#### PRODUCT INFORMATION

**Catalog Number:** C1361-1a

**Lot Number:** C1361-1a-090911

**Quantity:** 1 vial ( $2 \times 10^6$ ) 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

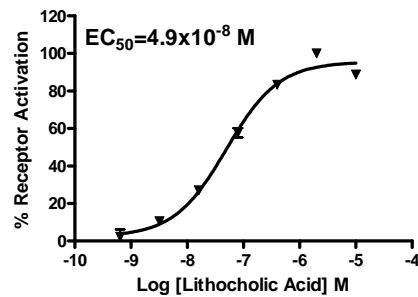
**Propagation Medium:** DMEM/F12, 10% FBS, 10 µg/mL puromycin

**Stability:** In progress

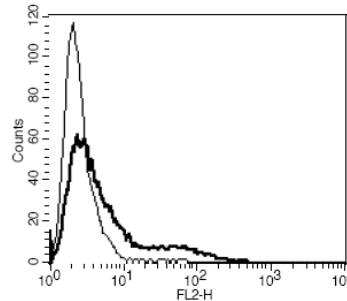
**Background:** The G protein-coupled bile acid receptor GPBAR1 (or GPR131) mediates bile acids-induced rapid elevation of intracellular cAMP levels. It is implicated in the suppression of macrophage functions and regulation of energy homeostasis by bile acids.

**Application:** Functional assays

**Figure 1**



**Figure 2**



**Figure 1.** Dose-dependent increase of intracellular cAMP upon treatment with ligand, measured with cAMP HiRange kit (Cisbio 62AM6PEC). **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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