MULTISCREEN^{TM} STABLE CELL LINE
HUMAN RECOMBINANT GPR43 RECEPTOR

.**PRODUCT INFORMATION**

Catalog Number: C1104-1

Lot Number: C1104-1-072911

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

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: CHO-K1

Transfection: Expression vector containing full-length human FFAR2 cDNA (GenBank Accession Number NM_005306) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

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

Stability: Stable after minimum two months continuous growth

2 (FFAR2), encodes a deduced 330-amino acid protein with 7 transmembrane domains. GPR43 is expressed by enteroendocrine L cells containing peptide YY in the human large intestine. The receptor binding of short-chain fatty acids potentially provides a molecular link between diet, gastrointestinal bacterial metabolism, and immune and inflammatory responses.

Application: Functional assays
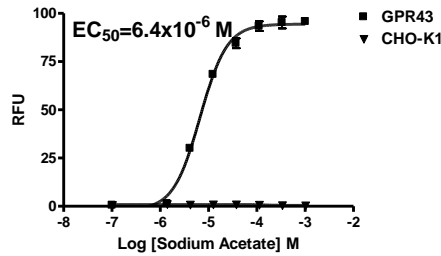
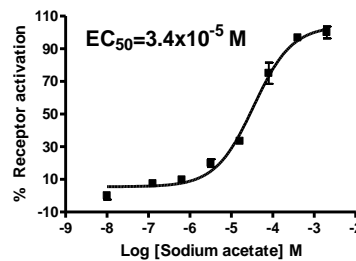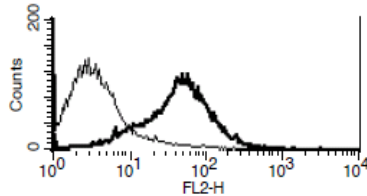**Figure 1**

Figure 2

Figure 3

Figure 1. Dose-dependent calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** 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 3.** 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. (1997) Cluster of four novel human G protein-coupled receptor genes occurring in close proximity to CD22 gene on chromosome 19q13.1. *Biochem Biophys Res Commun* 239:543-547.

.**Data Sheet**

Background: GPR43, or free fatty acid receptor

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