

MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT MRGPRX4 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: C1259

Lot Number: C1259-061022

Quantity: 1 vial (2 x 10⁶) frozen cells

Freeze Medium: Cell Banker 2
(Amsbio 11891)

Host cell: HEK293T

Transfection: Full-length human MRGPRX4 cDNA (GenBank Accession Number NM_054032.2) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

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

Stability: Stable for a minimum of 2 months in continuous culture

Background: MRGPRX4 (Mas-related G protein-coupled receptor X4) is a member of the sensory neuron-specific G protein-coupled receptors, which are uniquely expressed in small nociceptive sensory neurons. It is reported to be activated by bile acids, bilirubin, and urobilin that may accumulate in the skin and plasma of patients with chronic liver disease and chronic kidney disease.

Application: Functional assays

Figure 1

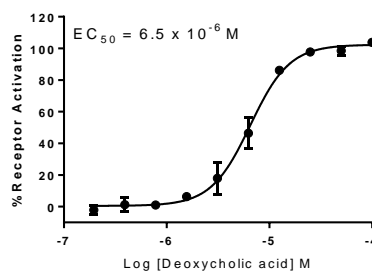


Figure 2

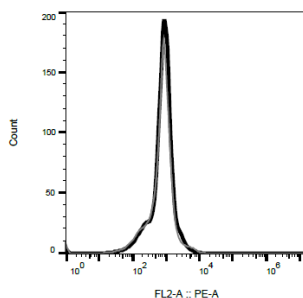


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with MULTISCREEN™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

References:

Meixiong et al. (2019) MRGPRX4 is a G protein-coupled receptor activated by bile acids that may contribute to cholestatic pruritus. Proceedings of the National Academy of Sciences. May 2019. DOI: 10.1073/pnas.1903316116

Yu et al. (2019) MRGPRX4 is a novel bile acid receptor 1 in cholestatic itch. eLife. doi: <https://doi.org/10.1101/633446>

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