

PRODUCT INFORMATION

Catalog Number: C1256b

Lot Number: C1256b-012425

Quantity: 1 vial (2 x 10⁶) frozen cells

Freeze Medium: Cellbanker 2

Host cell: HEK293T

Transfection: Full-length human MRGPRX1 cDNA (GenBank Accession

Number NM_147199)

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

Data sheet

Background: MRGPRX1 (MAS-related GPR member X1) is also known as SNSR4 (sensory neuron-specific G-protein-coupled receptor 4). It can be potently activated by enkephalins including BAM22 and BAM(8-22). MRGPRX1 receptor is expressed solely in small diameter primary sensory neurons. This restricted expression pattern is of considerable therapeutic interest because small nociceptors transmit chronic pain messages.

Application: Functional assays

Figure 1

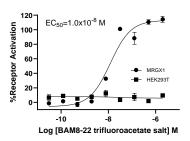


Figure 2

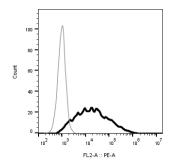


Figure 1. Dose-dependent calcium flux upon treatment with ligand, measured with MULTISCREEN™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). Figure 2. Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Black line: parental cells; gray line: receptor-expressing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

References:

Chen and Ikeda (2004) Modulation of ion channels and synaptic transmission by a human sensory neuron-specific G-protein-coupled receptor, SNSR4/mrgX1, heterologously expressed in cultured rat neurons. *J Neurosci* 24:5044-5053.

Ahmad and Dray (2004) Novel G protein-coupled receptors as pain targets. *Curr Opin Investig Drugs* 5:67-70.

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