

## MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT P2Y13 RECEPTOR

### Data sheet

#### PRODUCT INFORMATION

**Catalog Number:** C1139-3

**Lot Number:** C1139-3-103107

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

**Freeze Medium:** Sigma Freezing Medium (C-6164)

**Host cell:** 1321N1

**Transfection:** Expression vector containing full-length human P2Y13 cDNA (GenBank Accession Number NM\_023914) with FLAG tag sequence at N-terminus

**Recommended Storage:** Liquid nitrogen upon receiving

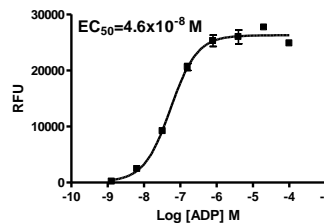
**Propagation Medium:** DMEM, 10% FBS, 1  $\mu$ g/mL puromycin

**Stability:** Stable after two month continuous growth

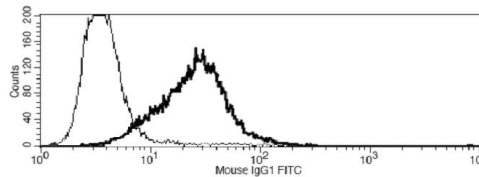
**Background:** GPR86 or P2Y13 is a 333-amino acid 7 transmembrane protein that lacks a leader peptide but possesses a DRF motif. Northern blot and PCR analysis has shown GPR86 to be expressed highly in the spleen, with weaker expression in placenta, leukocytes, brain, placenta, lung, liver, spinal cord, thymus, small intestine, uterus, stomach, testis, fetal brain and adrenal gland and no expression in the pancreas, heart, kidney, skeletal muscle, ovary or fetal aorta. Communi et al determined that GPR86 shows a high affinity for ADP through pharmacologic characterization of GPR86-transfected human astrocytoma cells and CHO cells.

**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:

Communi *et al.* (2001) Identification of a novel human ADP receptor coupled to G(i). *J Biol Chem* 276:41479-41485

Lee *et al.* (2001) Discovery and mapping of ten novel G proteincoupled receptor genes. *Gene* 275:83-91.

Wittenberger *et al.* (2001) An expressed sequence tag (EST) data mining strategy succeeding in the discovery of new G-protein coupled receptors. *J Molec Biol* 307:799-813.

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