

## MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT P2Y11 RECEPTOR

### Data sheet

#### PRODUCT INFORMATION

**Catalog Number:** C1169-3

**Lot Number:** C1169-3-031506

**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 P2RY11 cDNA (GenBank Accession Number NM\_002566) with FLAG tag sequence at N-terminus

**Recommended Storage:** Liquid nitrogen upon receiving

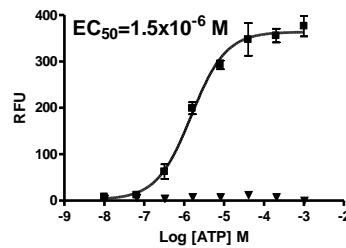
**Propagation Medium:** DMEM, 10% FBS, 1  $\mu\text{g/mL}$  puromycin

**Stability:** Stable after minimum of two months continuous growth

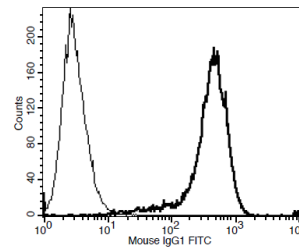
**Background:** P2Y purinoceptor 11 encodes P2Y11 (P2Y11) which is a receptor for ATP and ADP coupled to G-proteins that activate both phosphatidylinositol-calcium and adenylyl cyclase second messenger systems. P2Y11 receptor is unique amongst P2Y receptors with its coupling to the adenylyl cyclase pathway. Through this mechanism, released nucleotides can increase in P2Y11-containing cells. P2Y11 receptor has been reported to be involved in the granulocytic differentiation of promyelocytes and in the maturation of monocyte-derived dendritic cells.

**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. Thin line: parental cells; thick line: receptor-expressing cells.

#### References:

Torres *et al.* (2002) P2Y11 receptors activate adenylyl cyclase and contribute to nucleotide-promoted cAMP formation in MDCK-D(1) cells. A mechanism for nucleotide-mediated autocrine-paracrine regulation. *J Biol Chem* 277:7761-7765.

Schnurr *et al.* (2003) ATP gradients inhibit the migratory capacity of specific human dendritic cell types: implications for P2Y11 receptor signaling. *Blood* 102:613-620.

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