

## MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT P2Y12 RECEPTOR

### PRODUCT INFORMATION

**Catalog Number:** C1170-3a

**Lot Number:** C1170-3a-020320

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

**Freeze Medium:** Cell Banker II

**Host cell:** 1321N1

**Transfection:** Expression vector containing full-length P2RY12 cDNA (GenBank Accession Number NM\_022788) with FLAG tag sequence at N-terminus

**Recommended Storage:** Liquid nitrogen upon receiving

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

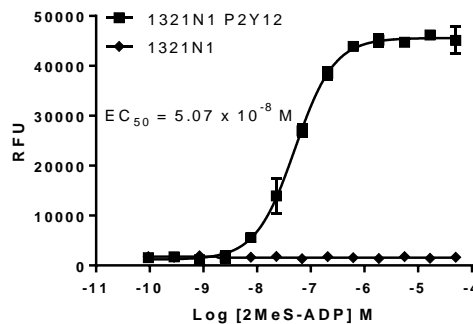
**Stability:** In progress

### Data sheet

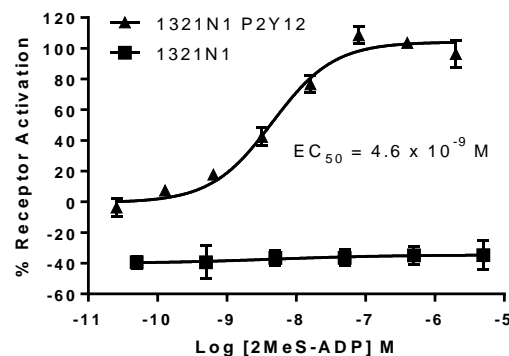
**Background:** P2RY12 or P2Y12 is a G-protein coupled receptor for ADP and ATP. ADT released from platelets acts in a positive feedback mechanism on P2Y12 and P2Y1 on platelets and is critical for sustained aggregation and stabilization of thrombin. P2Y12 receptor plays a central role in platelet activation and is the target of antithrombotic drugs such as ticlopidine and clopidogrel.

**Application:** Functional assays

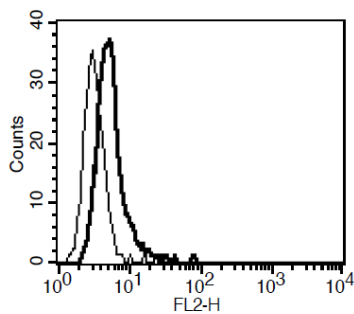
**Figure 1**



**Figure 2**



**Figure 3**



**Figure 1.** Dose-dependent stimulation of calcium flux upon treatment with ligand, monitored measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** Dose-dependent inhibition of forskolin-stimulated intracellular cAMP level 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:

Hardy *et al.* (2004) Reciprocal cross-talk between P2Y1 and P2Y12 receptors at the level of calcium signaling in human platelets. *Blood* 104:1745-1752.

Cattaneo *et al.* (2003) Molecular bases of defective signal transduction in the platelet P2Y12 receptor of a patient with congenital bleeding. *Proc Natl Acad Sci USA* 100: 1978-1983.

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