

MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT P2Y12 RECEPTOR

PRODUCT INFORMATION

Catalog Number: C1170-3

Lot Number: C1170-3-102008

Quantity: 1 vial (2×10^6) frozen cells

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: 1321N1

Transfection: Full-length human P2RY12 cDNA (GenBank Accession Number NM_022788)

Recommended Storage: Liquid nitrogen upon receiving

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

Stability: Stable after two months of continuous growth

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

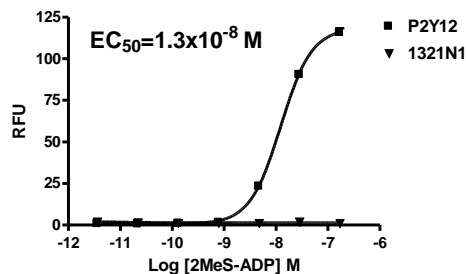


Figure 2

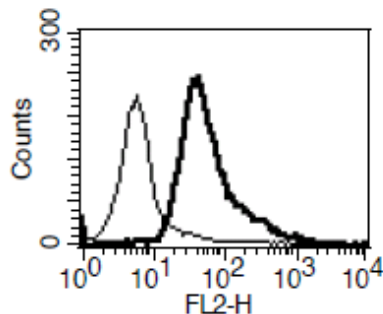


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick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

References:

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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