MULTISPAN
Assay Experts in GPCRs and Beyond

MULTISCREEN^{TM} MEMBRANE PREPARATION HUMAN RECOMBINANT P_2Y_1 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: MC1160-3

Lot Number: MC1160-3-011426

Quantity: 5 mg per vial

Protein concentration: 3.6 mg/mL

Packaging Buffer: 20mM Gly-Gly, 1 mM MgCl2, 25mM Sucrose (pH 7.2)

Host cell: 1321N1

Transfection: Full-length human P2Y1 cDNA (GenBank Accession Number NM_002563)

Recommended Storage: Liquid nitrogen upon receiving

Background: P2Y1 is a receptor for ATP and ADP. P2Y1 contributes to platelet shape change. A number of P2Y1 receptor-specific antagonists, such as, MRS-2179, A3P5PS, A3P5P and A2P5P have been discovered. They inhibit calcium ion mobilization and shape change in platelets. P2Y1-deficient mice and mice treated with the P2Y1 antagonist MRS2179 displayed significantly less arterial thrombosis than their respective controls. Combination of P2Y1 deficiency with P2Y12 inhibition led to a significant additive effect.

Application: Functional assays

Figure 1

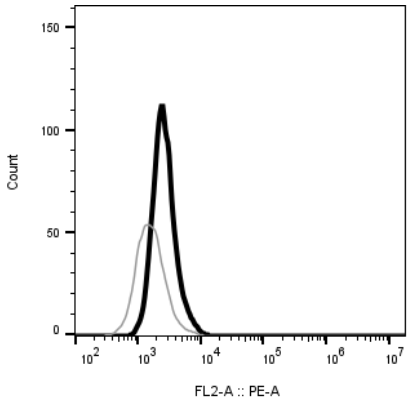

Figure 1. Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

References:

Baurand and Gachet (2003) The P2Y(1) receptor as a target for new antithrombotic drugs: a review of the P2Y(1) antagonist MRS-2179. *Cardiovasc Drug Rev* 21:67-76.

Jin *et al.* (1998) Molecular basis for ADP-induced platelet activation. II. The P2Y1 receptor mediates ADP-induced intracellular calcium mobilization and shape change in platelets. *J Biol Chem* 273:2030-2034.

Lenain *et al.* (2003) Inhibition of localized thrombosis in P2Y1-deficient mice and rodents treated with MRS2179, a P2Y1 receptor antagonist. *J Thromb Haemost* 1:1144-1149.

FOR RESEARCH USE ONLY.

26219 Eden Landing Road, Hayward, California 94545-3718 Phone: (510) 887-0817 info@multispaninc.com