

**MULTISCREEN™ STABLE CELL LINE
HUMAN RECOMBINANT IP1 RECEPTOR**

Data sheet

PRODUCT INFORMATION

Catalog Number: C1206-1

Lot Number: C1206-1-033109

Quantity: 1 vial (2 x 10⁶) frozen cells

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: CHO-K1

Transfection: Expression vector containing full-length human PTGIR cDNA (GenBank Accession Number: NM_000960) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM-F12, 10% FBS, 10 µg/mL puromycin

Stability: Stable after minimum two months continuous growth

Background: The human prostaglandin I₂ receptor IP₁ (or PTGIR) mediates the actions of prostaglandin I₂ (PGI₂ or prostacyclin), which is a labile metabolite of arachidonic acid produced in concert with the bis-enoic prostaglandins via the cyclooxygenase pathway. PGI₂ plays a major physiologic role as a strong mediator of vasodilation and inhibitor of platelet activation, and is an antithrombotic agent *in vivo* and mediates inflammation and pain. PGI₂ derived from COX2 plays a critical role in regulating the release of rennin and consequently in renovascular hypertension.

Application: Functional assays

Figure 1

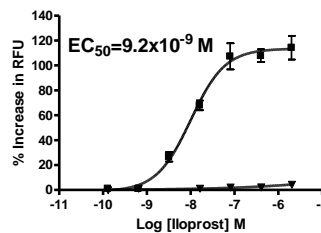


Figure 2

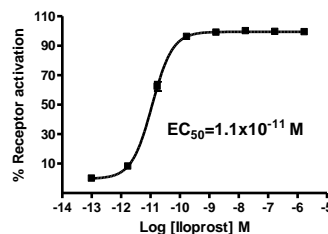


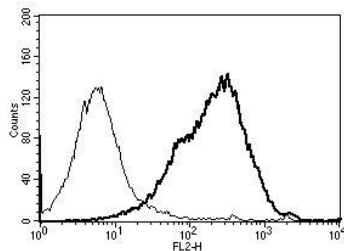
Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** Dose-dependent stimulation of intracellular cAMP level upon treatment with ligand, measured with Multiscreen™ TR-FRET cAMP 1.0 No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

Boie *et al.* (1994) Cloning and expression of a cDNA for the human prostanoid IP receptor. *J Biol Chem* 269:12173-12178.

Coleman *et al.* (1994) VIII International union of pharmacology classification of prostanoid receptors: properties, distribution, and structure of the receptors and their subtypes. *Pharm Rev* 46:205-229.

Figure 3



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