

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

**Data sheet**

**PRODUCT INFORMATION**

**Catalog Number:** C1365

**Lot Number:** C1365-111909

**Quantity:** 1 vial (2 x 10<sup>6</sup>) frozen cells

**Freeze Medium:** Sigma Freezing Medium (C-6164)

**Host cell:** HEK293T

**Transfection:** Expression vector containing full-length human TBXA2R cDNA (GenBank Accession Number NM\_001060.4) with FLAG tag sequence at N-terminus

**Recommended Storage:** Liquid nitrogen upon receiving

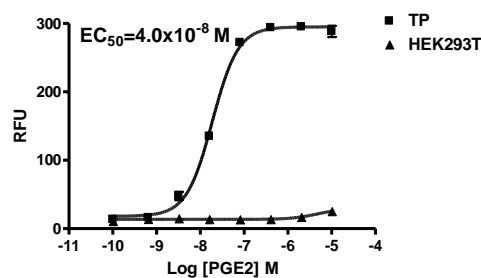
**Propagation Medium:** DMEM, 10% FBS, 1 µg/mL puromycin

**Stability:** Stable in culture for minimum of two months

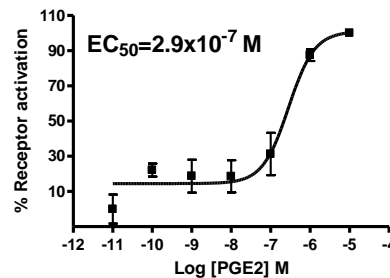
**Background:** The human TP (thromboxane A<sub>2</sub>) receptor is a very potent stimulator of platelet aggregation and a constrictor of vascular and respiratory smooth muscles. It has been shown to be a mediator in diseases such as myocardial infarction, stroke and bronchial asthma. TP receptors can be found on platelets, as well as macrophages, monocytes, vascular endothelial cells, and smooth muscle cells. TP receptor antagonists may also play a role in the treatment of atherothrombosis and stroke prevention.

**Application:** Functional assays

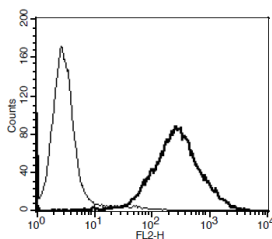
**Figure 1**



**Figure 2**



**Figure 3**



**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 accumulation of intracellular IP1 upon treatment with ligand, measured with IP-one Tb kit. **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:**

Chamorro (2009) TP receptor antagonism: a new concept in atherothrombosis and stroke prevention. *Cerebrovasc Dis* 27 Suppl 3:20-27.

Hirata *et al.* (1991) Cloning and expression of cDNA for a human thromboxane receptor. *Nature* 349:617-20.

Nusing *et al.* (1993) Characterization and chromosomal mapping of the human thromboxane A<sub>2</sub> receptor gene. *J Biol Chem* 268:25253-25259.

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