

**MULTISCREEN™ STABLE CELL LINE  
HUMAN RECOMBINANT A1 RECEPTOR**

**Data sheet**

**PRODUCT INFORMATION**

**Catalog Number:** C1427-1

**Lot Number:** C1427-1-031209

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

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

**Host cell:** CHO-K1

**Transfection:** Expression vector containing full-length human ADORA1 cDNA (GenBank Accession Number NM\_000674) with FLAG tag sequence at N-terminus

**Recommended Storage:** Liquid nitrogen upon receiving

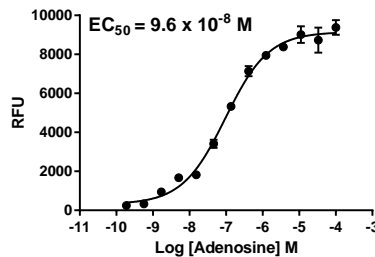
**Propagation Medium:** DMEM-F12, 10% FBS, 10  $\mu$ g/mL puromycin

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

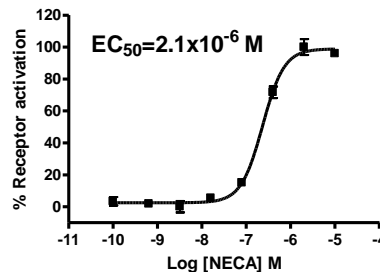
**Background:** Adenosine A1 receptor (ADORA1 or RDC7) is a G protein-coupled receptor for adenosine. RT-PCR detected A1 expression in the brain, colon, jejunum, ileum and kidney. A1 functions in sleep-wake regulation and the fertilization process.

**Application:** Functional assays

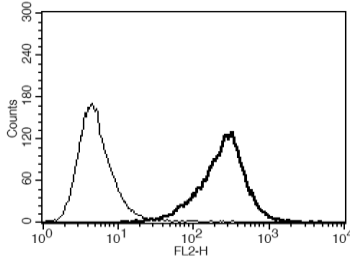
**Figure 1**



**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 inhibition of forskolin-stimulated intracellular cAMP accumulation 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:**

Ethier and Madison (2006) Adenosine A1 receptors mediate mobilization of calcium in human bronchial smooth muscle cells. *Am J Respir Cell Mol Biol* 35:496-502.

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