

**MULTISCREEN™ STABLE CELL LINE  
HUMAN RECOMBINANT A3 RECEPTOR**

**Data sheet**

**PRODUCT INFORMATION**

**Catalog Number:** C1430-1

**Lot Number:** C1430-1-120517

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

**Freeze Medium:** Cellbanker 2 (Amsbio 11891)

**Host cell:** CHO-K1

**Transfection:** Full-length Human ADORA3 cDNA (GenBank Accession NM\_000677.2) with FLAG-tag sequence at the N-terminus

**Recommended Storage:** Liquid nitrogen upon receiving

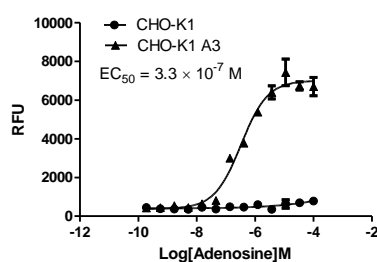
**Propagation Medium:** DMEM/F12, 10% FBS, 10 ug/mL puromycin

**Stability:** In Progress

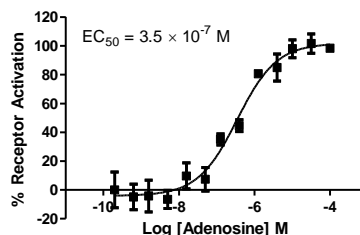
**Background:** Adenosine A3 receptors are involved in a variety of intracellular signaling pathways and physiological functions. They are expressed in a wide range of human tissues, but most predominantly in the lung and liver. Recent animal model studies have shown that A3 receptors play important roles in brain ischemia, immunosuppression, and bronchospasm. A3 receptor agonists and/or antagonists may have important clinical value in the treatment of asthma and inflammation.

**Application:** Functional assays

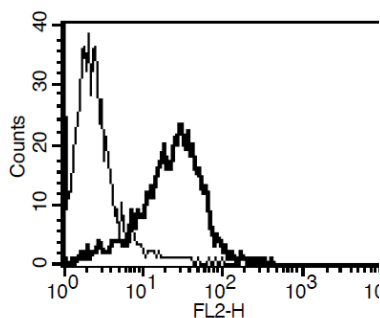
**Figure 1**



**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:**

Baraldi *et al.* (2000) A (3) adenosine receptor ligands: history and perspectives. *Med Res Rev* 20:103-128.

Salvatore *et al.* (1993) Molecular cloning and characterization of the human A3 adenosine receptor. *Proc Natl Acad Sci USA* 90:10365-10369.

Schepp *et al.* (2008) Bench-to-bedside review: adenosine receptors - promising targets in acute lung injury? *Crit Care* 12:226.

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