

## MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT TA1 RECEPTOR

### PRODUCT INFORMATION

**Catalog Number:** C1357a

**Lot Number:** C1357a-063011

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

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

**Host cell:** HEK293T

**Transfection:** Full-length human TAAR1 cDNA (GenBank Accession Number NM\_138327.1).

**Recommended Storage:** Liquid nitrogen upon receiving

**Propagation Medium:** DMEM, 10% FBS, 1  $\mu$ g/mL puromycin

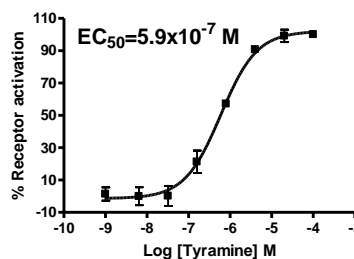
**Stability:** In progress

### Data sheet

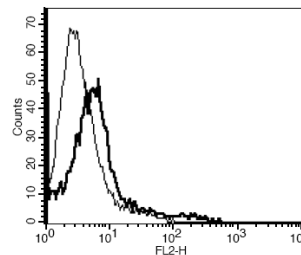
**Background:** TAAR1 (Trace Amine Receptor 1) or TA1 is a receptor for trace amines. The receptor can be activated by endogenous trace amines as well as metabolites of the biogenic amine neurotransmitters. Trace amines are biogenic amines present in very low levels in mammalian tissues. Although some trace amines have clearly defined roles as neurotransmitters in invertebrates, the extent to which they function as true neurotransmitters in vertebrates has remained speculative. Trace amines are likely to be involved in a variety of physiological functions that have yet to be fully understood. Trace amine receptors are potential direct targets for drugs of abuse, including amphetamine and 3,4-methylenedioxymethamphetamine (MDMA).

**Application:** Functional assays

**Figure 1**



**Figure 2**



**Figure 1.** Dose-dependent increase of intracellular cAMP accumulation upon treatment with ligand, measured with Multiscreen™ TR-FRET cAMP 1.0 No Wash Assay Kit (Multispan MSCM01). **Figure 2.** 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:

Miller *et al.* (2005) Primate trace amine receptor 1 modulation by the dopamine transporter. *J Pharmacol Exp Ther* 313:983-994.

Borowsky *et al.* (2001) Trace amines: identification of a family of mammalian G protein-coupled receptors. *Proc Natl Acad Sci USA* 98:8966-8971.

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