cAMP Hunter™ CHO-K1 rTAAR1 Gs Cell Line

Catalog Number: **95-0178C2** **Lot Number:** See Vial

Contents: 2 vials, 1 x 10^6 cells per vial in 1 mL

Background

cAMP Hunter™ Gs cell lines overexpress naturally Gs coupled, wildtype GPCRs and are designed to detect increases in intracellular cAMP levels in response to agonist stimulation of the receptor. These cell lines are designed to be used in conjunction with the HitHunter® cAMP Assay Detection Kit.

Product Information

Target GPCR: rTAAR1

Description: Trace amine associated receptor 1 (rat)

Receptor Family: Trace amine

Coupling: Gs

Accession Number: NM_134328.1

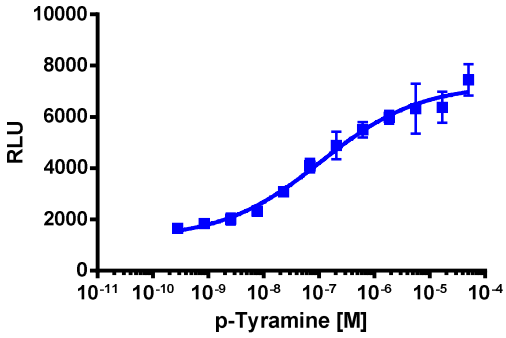
GPCR Species: Rat

Cell Type: CHO-K1

Storage: Short term (<24 h): Store at -80°C; Long term (>24 h): Store in vapor phase of liquid nitrogen.

Functional Performance

Cells were plated in a 384-well plate and incubated overnight at 37°C and 5% CO_2 to allow the cells to attach and grow. Cells were then stimulated with a control agonist, using the assay conditions described below. Following stimulation, signal was detected using the HitHunter cAMP Assay Detection Kit according to the recommended protocol. Please refer to page 2 for recommended assay reagents, detection reagents, and control compounds.



Cell Number/Well:	10000
Control Agonist:	p-Tyramine
Agonist Incubation Time (minutes):	60
Agonist Incubation Temperature (°C):	37
EC_{50} for Agonist Stimulation (nM):	108
Signal:Background at Agonist E_{max}:	4.5

Important! This assay requires an additional step: Please refer to Additional Protocol Information section.

Passage Stability

This cell line has been confirmed to be stable through 10 passages with no significant drop in assay window or change in EC_{50}.

Mycoplasma Testing

This lot was tested and found to be free of mycoplasma contamination. Data available upon request.

Required Materials

The following additional materials are required but not provided:

Product Use*	Product Description	Catalog Number
Detection	HitHunter® cAMP Assay for Small Molecules HitHunter cAMP Assay for Biologics	90-0075SM Series 90-0075LM Series
Cell Culture	AssayComplete™ Cell Culture Kit-107	92-3107G
Cell Plating	AssayComplete™ Cell Plating 2 Reagent	93-0563R2A
Cell Detachment	AssayComplete™ Cell Detachment Reagent	92-0009
Cell Thawing	AssayComplete™ Thawing Reagent T2	92-4102TR
Cell Freezing	AssayComplete™ Freezing Reagent F2	92-5102FR

*Please inquire about our cell line-specific AssayComplete Starter Packs to get you started with your cell culture needs.

Required Antibiotics

Antibiotic Name	Concentration (µg/mL)	Catalog Number
AssayComplete™ Puromycin	Not Applicable	Not Applicable
AssayComplete™ Hygromycin B	Not Applicable	Not Applicable
AssayComplete™ G418	800	92-0030

Additional Ligand Information

Control Agonist: p-Tyramine

Vendor: DiscoverX® (Catalog No. 92-1223)

Additional Protocol Information

Additional Product Information: an additional peptide leader sequence has been fused to the N-terminus of rTAAR1; The leader consists of a signal peptide, followed by three HA epitope tags, followed by the first 9 amino acids from ADRB2; The leader enables membrane localization and increased protein stability; refer to Mol Pharmacol. Sep 2008; 74 (3): 585–594

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