

cAMP Hunter™ CHO-K1 CHRM4 Gs Cell Line

Catalog Number: 95-0145C2 **Lot Number:** See Vial
Contents: 2 vials, 1 x 10⁶ cells per vial in 1 mL

Background

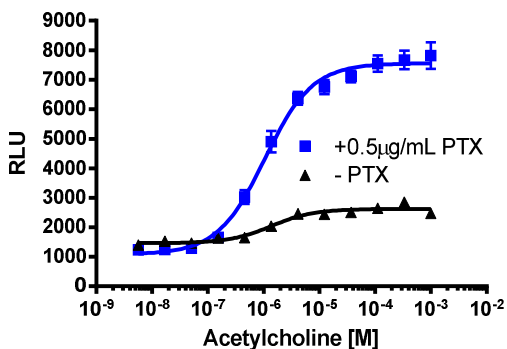
cAMP Hunter™ Gs cell lines overexpress naturally Gs coupled, wildtype GPCRs and are designed to detect increases in intracellular cAMP levels in response to agonist stimulation of the receptor. These cell lines are designed to be used in conjunction with the HitHunter® cAMP Assay Detection Kit.

Product Information

Target GPCR: CHRM4
Description: Cholinergic receptor, muscarinic 4
Receptor Family: Acetylcholine
Coupling: Gs & Gi/Go
Accession Number: NM_000741.2
GPCR Species: Human
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% CO₂ 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: 5000
Control Agonist: Acetylcholine
Agonist Incubation Time (minutes): 30
Agonist Incubation Temperature (°C): 37
EC₅₀ for Agonist Stimulation (nM): 1050
Signal:Background at Agonist E_{max}: 6.3

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 EC₅₀.

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: Acetylcholine

Vendor: DiscoverX® (Catalog No. 92-1125)

Additional Protocol Information

For 500 ng/mL pertussis toxin (PTX; Sigma P/N P7208) treatment: plate cells in 20 µL Cell Plating 2 Reagent (CP2) [follow cell plating instructions in cell line user manual]; Incubate for 4 hours @ 37°C, 5% CO₂; Prepare a 2500 ng/mL (5X) solution of PTX in CP2; Add 5 µL of the 2500 ng/mL PTX solution to the 20 µL cells (final concentration of PTX is 500 ng/mL); Incubate cells overnight @ 37°C, 5% CO₂; Follow HitHunter cAMP Detection Kit protocol in the kit's user manual.

For order placement or technical support, please call 1.866.448.4864 (North America) or +44.121.260.6142 (Europe) or e-mail info@discoverx.com. For additional information, please visit discoverx.com.

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