

cAMP Hunter™ CHO-K1 NPBWR2 Gi Cell Line

Catalog Number: 95-0100C2 **Lot Number:** See Vial
Contents: 2 vials, 1 x 10⁶ cells per vial in 1 mL

Background

cAMP Hunter™ Gi cell lines overexpress naturally Gi coupled, wildtype GPCRs and are designed to detect inhibition of intracellular cAMP production 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

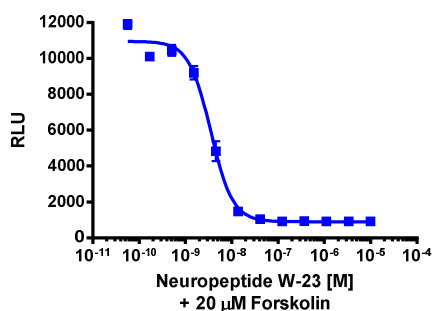
Target GPCR: NPBWR2
Description: Neuropeptides B/W receptor 2
Receptor Family: Neuropeptide B & W
Coupling: Gi/Go
Accession Number: NM_005286
GPCR Species: Human
Cell Type: CHO-K1
Storage: Short term (<24 h): Store at -80°C; Long term (>24 h): Store in vapor phase of liquid nitrogen.

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 + forskolin (Figure 1A) or with forskolin only (Figure 1B), 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.

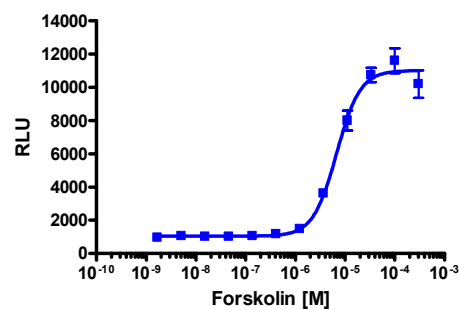
Cell Number/Well: 10000
Control Agonist: Neuropeptide W-23
Agonist Incubation Time (minutes): 30
Agonist Incubation Temperature (°C): 37

Figure 1A. Agonist Dose Response



EC₅₀ for Agonist Stimulation (nM): 3.5
Signal:Background at Agonist E_{max}: 13.0
Forskolin Concentration (μM): 20

Figure 1B. Forskolin Dose Response



EC₅₀ for Forskolin Stimulation (μM): 6.7
Signal:Background at Forskolin E_{max}: 10.6

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 | 90-0075SM Series |
| | HitHunter cAMP Assay for Biologics | 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: Neuropeptide W-23

Vendor: DiscoverX® (Catalog No. 92-1175)

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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