

PathHunter® CXCR4 Total GPCR Internalization U2OS Cell Line

Catalog Number: 93-0890C3 Lot Number: See Vial

Contents: 2 vials, 1 x 10⁶ cells per vial in 1 mL

Background

PathHunter Total GPCR Internalization cell lines are engineered to co-express the ProLink $^{\text{TM}}$ (PK) tagged GPCR, and an Enzyme Acceptor (EA) tag localized to the plasma membrane. Membrane bound, PK-tagged receptors are in close proximity to the EA, forcing complementation of the two β -galactosidase enzyme fragments (EA and PK). The resulting functional enzyme hydrolyzes substrate to generate a high basal chemiluminescent signal. Activation of the GPCR-PK induces internalization of the receptor, which dissociates the EA/PK complementation, and results in a loss of chemiluminescent signal.

Product Information

Target GPCR: CXCR4

Description: Chemokine (C-X-C motif) receptor 4

Receptor Family: Chemokine

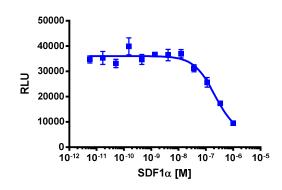
Coupling: Gi/Go

Accession Number: AY242129
GPCR Species: Human
Cell Type: U2OS

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 for at least 1 hour at 37°C and 5% CO ₂ to allow the cells to attach. Cells were then stimulated with a control agonist, using the assay conditions described below. Following stimulation, signal was detected using the PathHunter 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: SDF1a

Agonist Incubation Time (minutes): Overnight

Agonist Incubation Temperature (°C): 37

EC₅₀ for Agonist Stimulation (nM): 210.5

Signal:Background at Agonist E_{max} : 3.6



Passage Stability

This cell line has been confirmed to be stable through 10 passages with no significant drop in assay window or change in 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 | PathHunter® Detection Kit | 93-0001 |
| Cell Culture | AssayComplete™ Cell Culture Kit-103 | 92-3103G |
| Cell Plating | AssayComplete™ Cell Plating 5 Reagent | 93-0563R5A |
| Cell Detachment | AssayComplete™ Cell Detachment Reagent | 92-0009 |
| Cell Thawing | AssayComplete™ Thawing Reagent T3 | 92-4103TR |
| Cell Freezing | AssayComplete™ Freezing Reagent F3 | 92-5103FR |

^{*}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 | 250 | 92-0029 |
| AssayComplete™ G418 | 500 | 92-0030 |

Additional Ligand Information

Control Agonist: SDF1a

Vendor: DiscoverX® (Catalog No. 92-1011)

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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