DiscoverX

See Vial

Lot Number:

PathHunter[®] CHO-K1 DRD5 β-Arrestin Cell Line

Catalog Number:	93-0426C2	
Contents:	2 vials, 1 x 10^6 cells per vial in 1 mL	

Background

PathHunter β -Arrestin GPCR cell lines are engineered to co-express the ProLinkTM (PK) tagged GPCR and the Enzyme Acceptor (EA) tagged β -Arrestin. Activation of the GPCR-PK induces β -Arrestin-EA recruitment, forcing complementation of the two β -galactosidase enzyme fragments (EA and PK). The resulting functional enzyme hydrolyzes substrate to generate a chemiluminescent signal.

Product Information

Target GPCR:	DRD5
Description:	Dopamine receptor D5
Receptor Family:	Dopamine
Coupling:	Gs
Accession Number:	NM_000798.3
GPCR Species:	Human
β-Arrestin Isoform:	β-Arrestin-2
ProLink™ Tag:	PK1
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 PathHunter Detection Kit according to the recommended protocol. Please refer to page 2 for recommended assay reagents, detection reagents, and control compounds.

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	6000 -	₹ ¹
RLU	4000 -	l l
	2000 -	
	0 -	-12 10-11 10-10 10-9 10-8 10-7 10-6 10-5
	10	Dopamine [M]

Cell Number/Well:	5000
Control Agonist:	Dopamine
Agonist Incubation Time (minutes):	90
Agonist Incubation Temperature (°C):	37
EC₅₀ for Agonist Stimulation (nM):	110.2
Signal:Background at Agonist E _{max} :	9.1
Control Antagonist:	Risperidone
IC₅₀ of Antagonist (nM):	790.5

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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-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	300	92-0029
AssayComplete™ G418	800	92-0030

Additional Ligand Information

Control Compound: Dopamine

Vendor: DiscoverX[®] (Catalog No. 92-1161)

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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