

PathHunter® eXpress OPRD1 Activated GPCR Internalization Assay

Catalog Number: 93-0673E3

Lot Number:

See Vial

Contents: 1 x 10⁶ cells per vial in 0.1 mL

Background

PathHunter eXpress Activated GPCR Internalization cells are engineered to co-express an untagged GPCR, Enzyme Acceptor (EA) tagged β -Arrestin, and a ProLink™ (PK) tag localized to the endosomes. Activation of the GPCR induces β -Arrestin recruitment, followed by internalization of the Receptor/Arrestin-EA complex in PK-tagged endosomes. This forces complementation of the two β -galactosidase enzyme fragments (EA and PK), forming functional enzyme that hydrolyzes substrate to generate a chemiluminescent signal. These cells have been modified to prevent long term propagation and expansion using a proprietary compound that has no apparent effect on assay performance.

Product Information

Target GPCR: OPRD1

Description: Opioid receptor delta

Receptor Family: Opioid

Coupling: Gi/Go

Accession Number: NM_000911

GPCR Species: Human

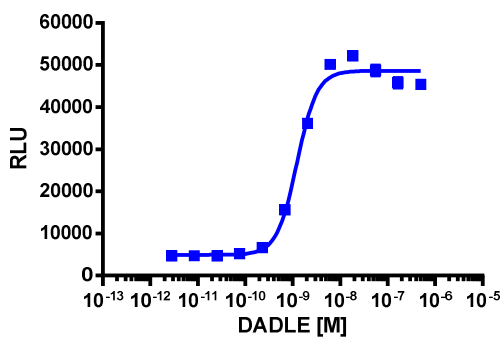
β -Arrestin Isoform: β -Arrestin-2

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 96-well plate and stimulated with a control agonist, using the assay conditions described below. Following stimulation, signal was detected according to the recommended protocol. Please refer below for information on control compounds.



Cell Number/Well:

10000

Control Agonist:

[D-Ala², D-Leu⁵]-Enkephalin (DADLE)

Cell Plating Reagent:

AssayComplete™ Cell Plating 0 Reagent

Cell Incubation Time (Hours):

Agonist Incubation Time (minutes):

180

Agonist Incubation Temperature (°C):

37

EC₅₀ for Agonist Stimulation (nM):

1.2

Signal:Background at Agonist E_{max}:

9.7

Additional Ligand Information

Control Agonist: [D-Ala2, D-Leu5]-Enkephalin (DADLE)

Vendor: Eurofins DiscoverX[®] (Catalog No. 92-1055)

Limited Use License Agreement

These products may be covered by issued US and/or foreign patents, patent application and subject to Limited Use Label License.

Please visit discoverx.com/license for a list of products that are governed by limited use label license terms and relevant patent and trademark information.

Ordering: +1.510.979.1415 option 4 or e-mail CustomerServiceDRX@eurofins.com

Technical support: +1.510.979.1415 option 5 or e-mail DRX_SupportUS@eurofinsUS.com

General product information: www.discoverx.com