

# PathHunter<sup>®</sup> eXpress GPR83 CHO-K1 $\beta$ -Arrestin Orphan GPCR Assay

**Catalog Number:** 93-0441E2A

**Lot Number:**

**Contents:**

**Background**

PathHunter eXpress  $\beta$ -Arrestin Orphan GPCR cells are engineered to co-express the ProLink<sup>™</sup> (PK) tagged GPCR and the Enzyme Acceptor (EA) tagged  $\beta$ -Arrestin. Activation of the GPCR-PK induces  $\beta$ -Arrestin-EA recruitment, forcing complementation of the two  $\beta$ -galactosidase enzyme fragments (EA and PK). The resulting functional enzyme 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**

<b>Target GPCR:</b>	GPR83	<b><math>\beta</math>-Arrestin Isoform:</b>	$\beta$ -Arrestin-2
<b>Description:</b>	G-protein coupled receptor 83	<b>ProLink<sup>™</sup> Tag:</b>	PK1
<b>Receptor Family:</b>	Class A Orphan	<b>Cell Type:</b>	CHO-K1
<b>Accession Number:</b>	NM_016540		
<b>GPCR Species:</b>	Human		
<b>Storage:</b>	Short term (<24 h): Store at -80°C; Long term (>24 h): Store in vapor phase of liquid nitrogen.		
<b>Cell Plating Reagent:</b>	AssayComplete <sup>™</sup> Cell Plating 1 Reagent		

**Functional Performance**

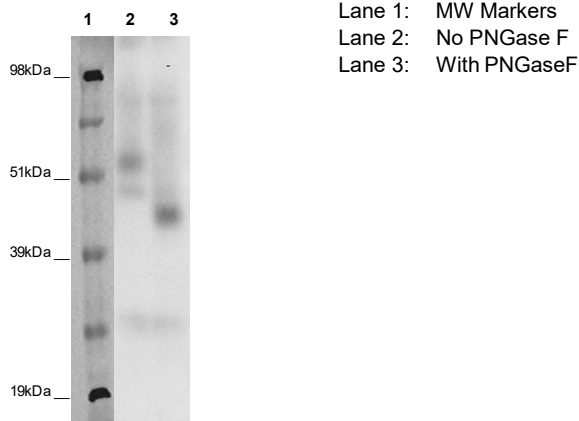


Figure 1. Cell lysates prepared from PathHunter  $\beta$ -Arrestin Orphan GPCR  $\beta$ -Arrestin Cell Lines were treated with PNGase F (Glyko: GKE -5003), run on a SDS-PAGE gel and analyzed. Untreated lane resolves a band of appropriate size corresponding to GPCR-PK fusion protein and the PNGase F treated lane resolves a deglycosylated band indicative of proper expression and folding of GPCR protein.

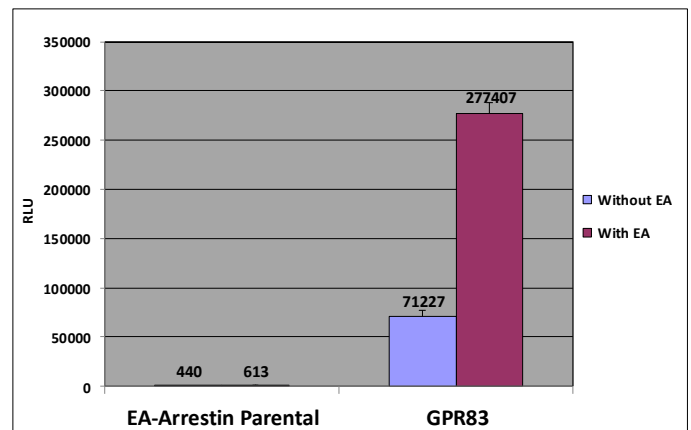


Figure 2. PathHunter eXpress cells were analyzed for basal activity as well as GPCR-ProLink<sup>™</sup> expression by comparing the ratio of signal between untreated cells and cells treated with saturating amounts of exogenous EA, using ProLink<sup>™</sup> Detection Kit (DrX: 92-0006). Signal from complementation of ProLink<sup>™</sup> and EA fragments correlates to the amount of GPCR-PK expression in the cell line.

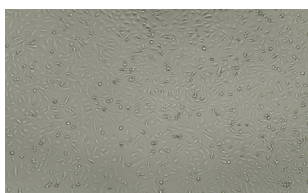


Figure 3. Viability of PathHunter eXpress cells were confirmed by bright field microscopy.

Ordering: +1.510.979.1415 option 4 or e-mail [CustomerServiceDRX@eurofins.com](mailto:CustomerServiceDRX@eurofins.com)  
Technical support: +1.510.979.1415 option 5 or e-mail [DRX\\_SupportUS@eurofinsUS.com](mailto:DRX_SupportUS@eurofinsUS.com)  
General product information: [www.discoverx.com](http://www.discoverx.com)

### 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](http://discoverx.com/license) for a list of products that are governed by limited use label license terms and relevant patent and trademark information.