

# PathHunter® eXpress GPR31 CHO-K1 β-Arrestin Orphan GPCR Assay

**Catalog Number:** 93-0406E2

**Lot Number:**

**Contents:** 1 x 10<sup>6</sup> cells per vial in 0.1 mL

## Background

PathHunter β-Arrestin Orphan GPCR cell lines are engineered to co-express the ProLink™ (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

<b>Target GPCR:</b>	GPR31
<b>Description:</b>	G-protein coupled receptor 31
<b>Receptor Family:</b>	Class A Orphan
<b>Accession Number:</b>	NM_005299
<b>GPCR Species:</b>	Human
<b>β-Arrestin Isoform:</b>	β-Arrestin-2
<b>ProLink™ Tag:</b>	PK1
<b>Cell Type:</b>	CHO-K1
<b>Storage:</b>	Short term (<24 h): Store at -80°C; Long term (>24 h): Store in vapor phase of liquid nitrogen.

## Functional Performance

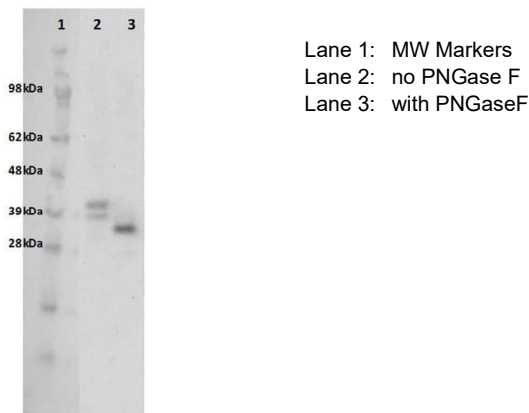


Figure 1. Cell lysates prepared from PathHunter β-Arrestin Orphan GPCR cell lines were treated with PNGase F (Glyko; Cat. #GKE-5003), run on a SDS-PAGE gel and analyzed. Untreated lane resolves a band of appropriate size corresponding to GPCR-PK fusion protein and the PNGase F treated lane resolves a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

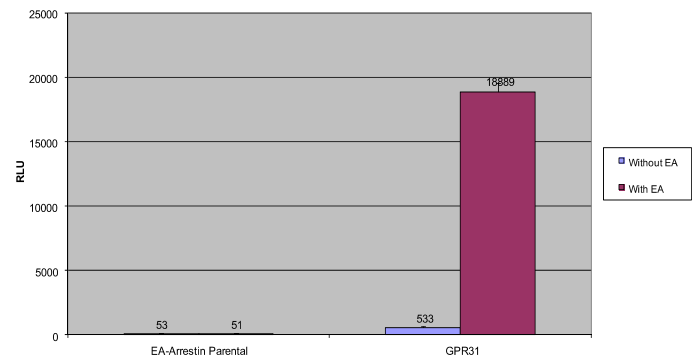


Figure 2. PathHunter β-Arrestin Orphan GPCR cells were analyzed for basal activity as well as GPCR-ProLink™ expression by comparing the ratio of signal between untreated cells and cells treated with saturating amounts of exogenous EA, using ProLink™ Detection Kit (DrX: 92-0006). Signal from complementation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

### Passage Stability

This cell line has been confirmed to be stable through a Minimum of 10 passages with no significant change in GPCR-PK expression level.

### 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	Not Applicable	Not Applicable
AssayComplete™ G418	800	92-0030

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