

## PathHunter<sup>®</sup> U2OS GPR22 $\beta$ -Arrestin Orphan GPCR Cell Line

**Catalog Number:** 93-1085C3 **Lot Number:** See Vial  
**Contents:** 2 vials, 1 x 10<sup>6</sup> cells per vial in 1 mL

### Background

PathHunter  $\beta$ -Arrestin Orphan GPCR cell lines 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.

### Product Information

**Target GPCR:** GPR22  
**Description:** G-protein coupled receptor 22  
**Receptor Family:** Class A Orphan  
**Accession Number:** NM\_005295.2  
**GPCR Species:** Human  
 **$\beta$ -Arrestin Isoform:**  $\beta$ -Arrestin-2  
**ProLink<sup>™</sup> Tag:** PK1  
**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

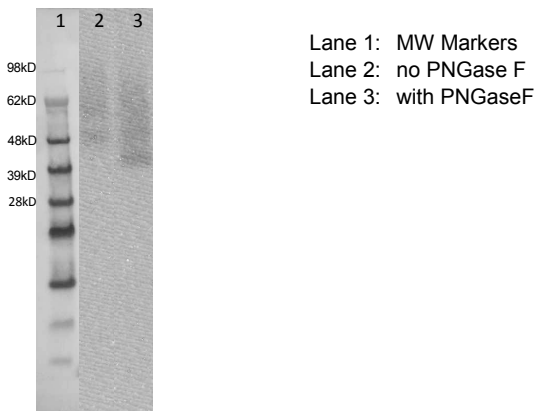


Figure 1. Cell lysates prepared from PathHunter  $\beta$ -Arrestin Orphan GPCR cell lines were treated with PNGase F (Glyko; Cat. #GKE-5003), run on a SDS-PAGE gel and analyzed. Untreated lane resolves a band of appropriate size corresponding to GPCR-PK fusion protein and the PNGase F treated lane resolves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

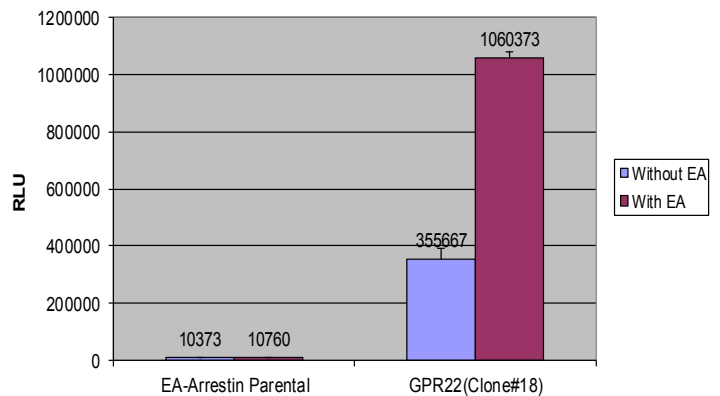


Figure 2. PathHunter  $\beta$ -Arrestin Orphan GPCR cells were analyzed for basal activity as well as GPCR-ProLink<sup>™</sup> expression by comparing the ratio of signal between untreated cells and cells treated with saturating amounts of exogenous EA, using ProLink<sup>™</sup> Detection Kit (DrX: 92-0006).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

### Passage Stability

This cell line has been confirmed to be stable through 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 <sup>®</sup> Detection Kit	93-0001
Cell Culture	AssayComplete™ Cell Culture Kit-103	92-3103G
Cell Plating	AssayComplete™ Cell Plating 1 Reagent	93-0563R1A
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

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](mailto:info@discoverx.com). For additional information, please visit [discoverx.com](http://discoverx.com).

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