

# PathHunter<sup>®</sup> eXpress GPR20 HEK 293 $\beta$ -Arrestin Orphan GPCR Assay

**Catalog Number:** 93-0405E1

**Lot Number:**

**Contents:** 1.25 x 10<sup>6</sup> cells per vial in 0.1 mL

## 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

**Target GPCR:** GPR20

**Description:** G-protein coupled receptor 20

**Receptor Family:** Class A Orphan

**$\beta$ -Arrestin Isoform:**  $\beta$ -Arrestin-2

**Accession Number:** NM\_005293

**ProLink<sup>™</sup> Tag:** PK1

**GPCR Species:** Human

**Cell Type:** HEK 293

**Storage:** Short term (<24 h): Store at -80°C; Long term (>24 h): Store in vapor phase of liquid nitrogen.

**Cell Plating Reagent:** AssayComplete<sup>™</sup> Cell Plating 1 Reagent

## Functional Performance

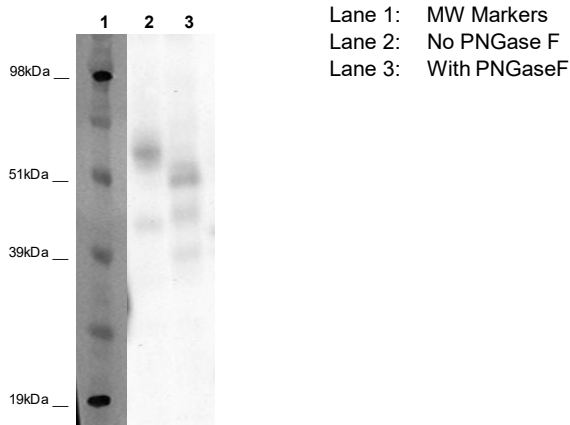


Figure 1. Cell lysates prepared from PathHunter  $\beta$ -Arrestin Orphan GPCR  $\beta$ -Arrestin Cell Lines were treated with PNGase F (Glyko: GKE -5003), run on a SDS-PAGE gel and analyzed. Untreated lane resolves a band of appropriate size corresponding to GPCR-PK fusion protein and the PNGase F treated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

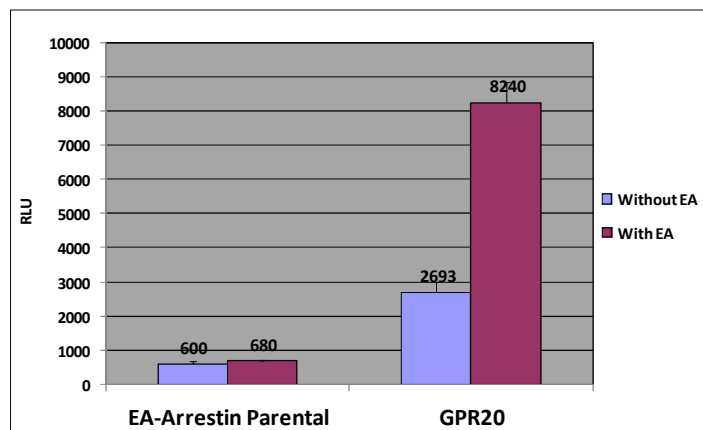


Figure 2. PathHunter eXpress cells were analyzed for basal activity as well as GPCR-ProLink<sup>™</sup> expression by comparing the ratio of signal between untreated cells and cells treated with saturating amounts of exogenous EA, using ProLink<sup>™</sup> Detection Kit (DrX: 92-0006). Signal from complementation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

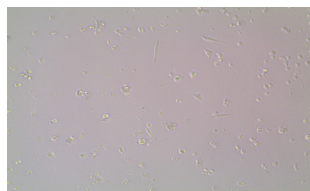


Figure 3. Viability of PathHunter eXpress cells were confirmed by bright field microscopy.

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