

## PathHunter<sup>®</sup> MC2R $\beta$ -Arrestin Cell Line (U2OS)

**Catalog Number:** 93-1189C3

**Lot Number:** see vial

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

### Background

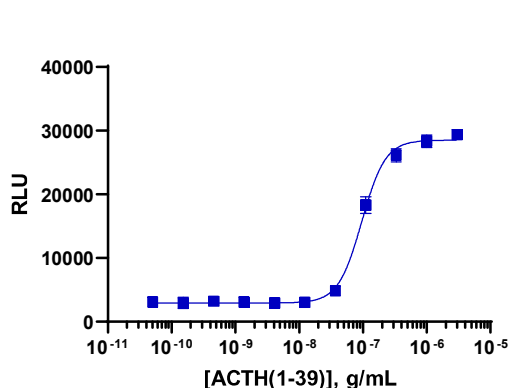
PathHunter  $\beta$ -Arrestin GPCR cell lines are engineered to co-express the ProLink<sup>™</sup> (PK) tagged GPCR and the Enzyme Acceptor (EA) tagged  $\beta$ -Arrestin. Activation of the GPCR-PK induces  $\beta$ -Arrestin-EA recruitment, forcing complementation of the two  $\beta$ -galactosidase enzyme fragments (EA and PK). The resulting functional enzyme hydrolyzes substrate to generate a chemiluminescent signal.

### Product Information

<b>Target GPCR:</b>	MC2R	<b>Co-Receptor:</b>	MRAP
<b>Description:</b>	Melanocortin 2 receptor	<b>Co-Receptor Description:</b>	Melanocortin 2 receptor accessory protein
<b>Receptor Family:</b>	Melanocortin	<b>Co-Receptor Accession #:</b>	NP_001366157.1
<b>Coupling:</b>	Gs		
<b>Accession Number:</b>	NM_000529.2		
<b>GPCR Species:</b>	Human		
<b><math>\beta</math>-Arrestin Isoform:</b>	$\beta$ -Arrestin-2		
<b>ProLink<sup>™</sup> Tag:</b>	PK1		
<b>Cell Type:</b>	U2OS		
<b>Storage:</b>	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 384-well plate and incubated overnight at 37°C and 5% CO<sub>2</sub> to allow the cells to attach and grow. Cells were then stimulated with a control agonist, using the assay conditions described below. Following stimulation, signal was detected using the PathHunter Detection Kit according to the recommended protocol. Please refer to page 2 for recommended assay reagents, detection reagents, and control compounds.



<b>Cell Number/Well:</b>	5000
<b>Control Agonist:</b>	ACTH (1-39)
<b>Agonist Incubation Time (minutes):</b>	90
<b>Agonist Incubation Temperature (°C):</b>	37
<b>EC<sub>50</sub> for Agonist Stimulation (nM):</b>	96
<b>Signal:Background at Agonist E<sub>max</sub>:</b>	9.7

### Passage Stability

This cell line has been confirmed to be stable through a minimum of 10 passages with no significant drop in assay window or change in EC<sub>50</sub>.

### 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® Flash Detection Kit	93-0247
Cell Culture	AssayComplete™ Cell Culture Kit-103	92-3103G
Cell Plating	AssayComplete™ Cell Plating 5 Reagent	93-0563R5A
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	0.25	92-0028
AssayComplete™ Hygromycin B	250	92-0029
AssayComplete™ G418	500	92-0030

### Additional Ligand Information

**Control Compound:** ACTH (1-39)

**Vendor:** Genscript (Catalog No. RP11304-0.5) or equivalent

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