

## PathHunter<sup>®</sup> U2OS FGFR1 Functional Assay

**Catalog Number:** 93-1090C3

**Lot Number:** See Vial

**Contents:** 2 x 10<sup>6</sup> cells per vial in 1 mL

### Background

PathHunter Receptor Tyrosine Kinase (RTK) Functional cell lines are engineered to co-express a ProLink<sup>™</sup> (PK) tagged RTK, an Enzyme Acceptor (EA) tagged SH2 domain, and, in some cases, an untagged co-receptor. Activation of the RTK-PK induces receptor dimerization, leading to SH2-EA recruitment, and 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 RTK:** FGFR1

**RTK Accession #:** NM\_001174063

**Description:** Fibroblast growth factor receptor 1

**Kinase Species:** Human

**SH2 Domain:** mPLCG1

**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

Cells were plated in a 384-well plate and incubated 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.

**Cell Number/Well:** 10000

**Control Agonist 1:** Recombinant Human FGF basic

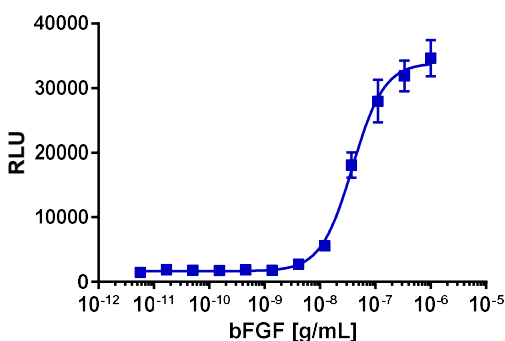
**Cell Incubation Time (hours):** 4

**Agonist Incubation Time (minutes):** Overnight

**Agonist Incubation Temperature (°C):** 37

**EC<sub>50</sub> for SH2 recruitment (ng/mL):** 38.7

**Signal:Background at agonist E<sub>max</sub>:** 23.4



The SH2 domains of mouse and human PLCG1 share 99% amino acid sequence homology and use of the mouse sequence will not impact functional assay performance.

### 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® Detection Kit              | 93-0001        |
| Cell Culture    | AssayComplete™ Cell Culture Kit-103    | 92-3103G       |
| Cell Plating    | AssayComplete™ Cell Plating 16 Reagent | 93-0563R16A    |
| 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        |

### Additional Ligand Information

**Control Agonist 1:** Recombinant Human FGF basic

**Vendor:** Eurofins DiscoverX® (Catalog No. 92-1027)

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