

## PathHunter® eXpress TGFBR1/ACVR2B Dimerization Assay

**Catalog Number:** 93-1046E3

**Lot Number:**

See Vial

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

### Background

The PathHunter® Dimerization assay detects ligand induced dimerization of two subunits of a receptor-dimer pair. The cells have been engineered to co-express one receptor subunit fused to Enzyme Donor (ED), and a second dimer partner fused to Enzyme Acceptor (EA). Cytoplasmic tail may have been deleted from one or both receptors. Binding of an agonist to one receptor subunit induces it to interact with its dimer partner, forcing complementation of the two enzyme fragments. This results in the formation of a functional enzyme that hydrolyzes a 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 Protein 1:** TGFBR1

**Target Protein 2:** ACVR2B

**Amino Acid Range:** 1 - 158

**Amino Acid Range:** 1 - 164

**Accession #:** NM\_004612

**Accession #:** NM\_001106.3

**Description:** Transforming growth factor, beta receptor 1

**Description:** Activin A receptor, type IIB

**Target Tag 1:** EA

**Target Tag 2:** PK1

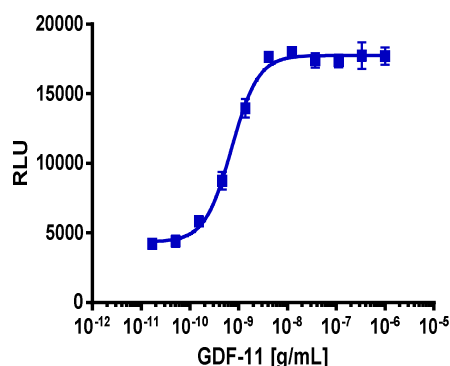
**Target Species:** Human

**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 96-well plate and incubated at 37°C/5% CO<sub>2</sub> for the Cell Seeding Time indicated below. Cells were then stimulated with a control compound using the assay conditions described below. Following stimulation, signal was detected using the PathHunter Detection Reagents provided in the kit according to the recommended protocol. For a detailed protocol, please refer to the user manual.



**Cell Number/Well:** 10000

**Cell Plating Reagent:** AssayComplete™ Cell Plating 5 Reagent

**Cell Seeding Time (Hours):** 24

**Control Compound:** GDF-11

**Compound Incubation Time (minutes):** 360

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

**EC<sub>50</sub> for Compound Stimulation (ng/mL):** 0.71

**Signal:Background at Compound E<sub>max</sub>:** 4.2

### Additional Ligand Information

**Control Compound:** GDF-11

**Vendor:** Eurofins DiscoverX<sup>®</sup> (Catalog No. 92-1268)

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