

PathHunter® U2OS EGFR/EGFR Dimerization Cell Line

Catalog Number: 93-0989C3

Lot Number: See Vial

Contents: 1 x 10⁶ cells per vial in 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.

Product Information

Target Protein 1: EGFR

Target Protein 2: EGFR

Amino Acid Range: 1 - 679

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Accession #: NM_005228.3

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Description: Epidermal growth factor receptor

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Target Tag 1: PK1

Target Tag 2: EA

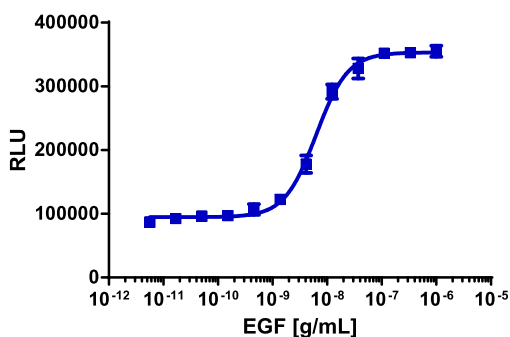
Target Species: Human

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 seeded in a 96-well plate, incubated at 37°C / 5% CO₂ followed by stimulation with a control ligand, as defined in the assay conditions below. After stimulation, assay 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: 5000

Cell Seeding Time (Hours): 4

Control Compound: Recombinant Human EGF

Compound Incubation Time (minutes): Overnight

Compound Incubation Temperature (°C): 37

EC₅₀ for Compound Stimulation (ng/mL): 6.3

Signal:Background at Compound E_{max}: 4.0

For assays requiring overnight incubation with ligand to obtain the optimal assay window, we recommend seeding cells 4 -6 hours prior to addition of ligand,

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 EC₅₀.

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 |
| Ligand Dilution | AssayComplete™ Protein Dilution Buffer | 92-0023M |

*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 Compound: Recombinant Human EGF

Vendor: Eurofins DiscoverX[®] (Catalog No. 92-1113)

Ordering: +1.510.979.1415 option 4 or e-mail CustomerServiceDRX@eurofins.com
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