

PathHunter® HEK 293 IL22RA1/IL10RB Dimerization Cell Line

Catalog Number: 93-1026C1 **Lot Number:** See Vial
Contents: 2 vials, 1 x 10⁶ cells per vial in 1 mL

Background

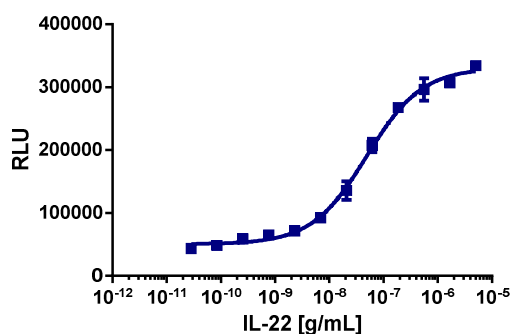
The PathHunter® Dimerization assay detects ligand induced dimerization of two subunits of a receptor-dimer pair. The cells have been engineered to co-express one receptor subunit fused to Enzyme Donor (ED), and a second dimer partner fused to Enzyme Acceptor (EA). Binding of an agonist to one receptor 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:	IL22RA1	Target Protein 2:	IL10RB
Accession #:	NM_021258.3	Accession #:	NM_000628.4
Description:	interleukin 22 receptor, alpha 1	Description:	Interleukin 10 receptor, beta
Target Tag 1:	PK1	Target Tag 2:	EA
Target 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.		

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:	IL-22
Compound Incubation Time (minutes):	Overnight
Compound Incubation Temperature (°C):	37
EC₅₀ for Compound Stimulation (ng/mL):	48.9
Signal:Background at Compound E_{max}:	7.7

For optimal performance, allow cells to adhere for 4 hours prior to addition of ligand; incubate with ligand for 16hr.

Passage Stability

This cell line has been confirmed to be stable through 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-105	92-3105G
Cell Plating	AssayComplete™ Cell Plating 7 Reagent	93-0563R7A
Cell Detachment	AssayComplete™ Cell Detachment Reagent	92-0009
Cell Thawing	AssayComplete™ Thawing Reagent T1	92-4101TR
Cell Freezing	AssayComplete™ Freezing Reagent F1	92-5101FR
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	200	92-0029
AssayComplete™ G418	800	92-0030

Additional Ligand Information

Control Compound: IL-22

Vendor: DiscoverX® (Catalog No. 92-1277)

For order placement or technical support, please call 1.866.448.4864 (North America) or +44.121.260.6142 (Europe) or e-mail info@discoverx.com. For additional information, please visit 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 for a list of products that are governed by limited use label license terms and relevant patent and trademark information.