

PathHunter® HepG2 IL11RA Signaling Reporter Cell Line

Catalog Number: 93-1168C044

Lot Number: See Vial

Contents: 1 x 10⁶ cells per vial in 1 mL

Background

PathHunter Pathway Reporter cell lines are engineered to express an Enzyme Donor (ED) tagged reporter protein controlled by a pathway-inducible transcriptional response element. Pathway activation via endogenous or exogenous target results in induced expressions of the ED-tagged protein. Addition of exogenous Enzyme Acceptor (EA), and buffer, lyses the cell and forces complementation of the ED and EA enzyme fragments. This results in the formation of a functional enzyme that hydrolyzes substrate to generate a chemiluminescent signal.

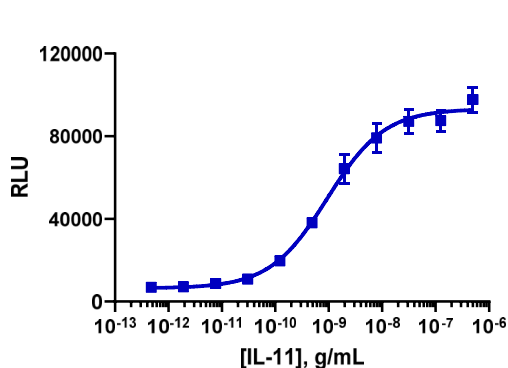
Product Information

Target Receptor IL11RA
Target Accession # NM_001142784.2
Description: interleukin 11 receptor, alpha

Target Species: Human
Response Element STAT3
Reporter ED Tag: ePL
Cell Type: HepG2
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 and 5% CO₂ to allow the cells to attach and grow. Cells were then stimulated with a control compound, 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: 5000
Cell Seeding Time (hours): 4
Control Agonist: IL-11
Ligand Incubation Time (minutes): 960
Ligand Incubation Temperature (°C): 37
EC₅₀ for compound stimulation (ng/mL): 0.94
Signal:Background at agonist E_{max}: 14.3
Detection Incubation Time (hrs.) 1

HepG2 cells can be difficult to recover from thaw & to culture. Refer to the ATCC HepG2 FAQ section for more info (<https://www.atcc.org/products/hb-8065>). Non-adherent cells may take 3d after thaw to attach. Floating cells can be centrifuged and replated to aid attachment. Once attached, cells may take additional time to dissociate and form clumps. Pipet cells carefully to re-suspend cells.

The following protocol is recommended for PathHunter PL/PK Detection: 1) Add 20 µL of 1:1 EA Reagent & Lysis Buffer mixture to each well & incubate for 15 mins at room temperature (R/T), 2) Add 40 µL of Substrate Reagent to each well, incubate plate 1 hr at R/T in the dark, & read plate.

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 [®] ProLabel [®] /ProLink [™] Detection Kit	93-0812
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	Not Applicable	Not Applicable
AssayComplete [™] Hygromycin B	200	92-0029
AssayComplete [™] G418	500	92-0030
AssayComplete [™] Blasticidin	N/A	R21001 (Invitrogen)

Additional Ligand Information

Control Agonist: IL-11

Vendor: Eurofins DiscoverX[®] (Catalog No. 92-1272)

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