

PathHunter[®] U2OS NUC-EA Parental Cell Line

Catalog Number: 93-0178 **Lot Number:** See Vial

Contents: 2 vials, 2 x 10⁶ cells per vial in 1 mL

Background

PathHunter translocation EA parental cell lines use DiscoverX's proprietary enzyme fragment complementation (EFC) technology. The cell lines are engineered to express a large fragment of β -galactosidase (β -gal) called enzyme acceptor (EA) fused to a reporter protein (Reporter-EA) which is localized to a specific subcellular compartment. Introduction of a smaller fragment of β -gal called ED [ProLabel (PL) or ProLink (PK)] fused to a target protein into EA cells allows for development of assays to monitor translocation of the target protein into the reporter protein 'labeled' subcellular compartment. Assays using these cell lines can be used to screen and study ligands (e.g. agonists/antagonists, pharmacological chaperones, etc.) or potentially other experimental manipulations that results in translocation of the target protein to the compartment where the Reporter-EA resides. Co-localization of these two proteins forces complementation of the two β -gal enzyme fragments (EA and ED), which results in a functional enzyme which hydrolyzes PathHunter detection reagents to generate a chemiluminescent signal.

Product Information

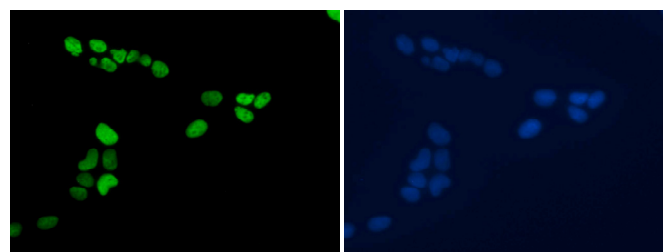
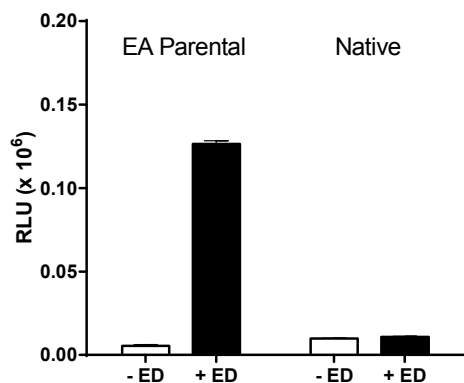
Expressed Protein: NUC-EA

Tag Compartment: Nucleus (nucleoplasm)

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



EA Parental and native U2OS cells were plated in a 384-well plate and incubated overnight at 37°C/5% CO₂. Cells were lysed, excess PK peptide was added and β -galactosidase 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.

Co-localization of anti-EA staining (green; left) and nucleic acid stain, DAPI (blue; right) in U2OS NUC-EA cells indicates expression of NUC-EA reporter protein in the nucleus.

Passage Stability

This cell line has been confirmed to stably express the EA-fusion reporter protein through 10 passages.

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 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	Not Applicable	Not Applicable

ProLink™ Vectors (minimum one required)

Product Description	Catalog Number
pCMV-ProLink 1 Vector	93-0167
pCMV-ProLink 2 Vector	93-0171

For order placement or technical support, please call 1.510.771.3500 (North America) +44.121.260.6142 (Europe) or e-mail info@discoverx.com. For additional information, please visit discoverx.com.

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