

KILR[®] Jurkat PD-1 Cell Line

Catalog Number: 97-1037C019

Lot Number:

See Vial

Contents: 2 x 10⁶ cells per vial in 1 mL

Background

KILR cell lines are engineered to express an enhanced Prolabel (ePL) tagged housekeeping gene and may sometimes overexpress an untagged version of a receptor. Once the cells have been lysed the ePL-tagged protein is released into the media. Addition of enzyme acceptor (EA) will cause the complementation of the β-galactosidase enzyme fragments, EA and ePL. The resulting functional enzyme will hydrolyze its substrate to generate a chemiluminescent signal.

Product Information

Cell Background: Jurkat (expressing human PD-1 (Accession #: NM_005018.2))

Cell Line Species: Human

Cell Line Source: ATCC

Cell Type: T lymphocyte

Culture Mode: Suspension

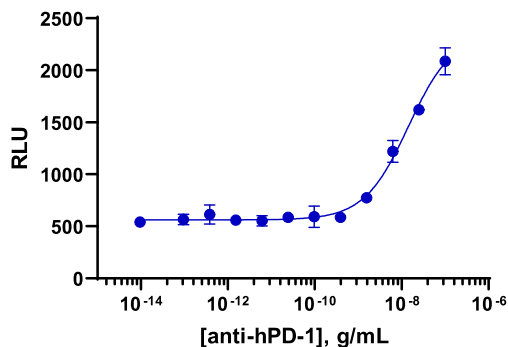
ADCC Validation: Anti-hPD1

CDC Validation: N/A

Storage: Short term (<24 h): Store at -80°C; Long term (>24 h): Store in vapor phase of liquid nitrogen.

ADCC Assay Performance

Cells were plated in a 96-well plate and incubated at 37°C and 5% CO₂ for the indicated amount of time. Antibody was added and opsonized for the indicated time (below). Effector cells were added and the plate was incubated at 37°C/5% CO₂ using the assay conditions described below. Target cell death was detected using the KILR detection reagent according to the recommended protocol. Additional reagents needed are noted on this document.



Target Cell Number/Well:	5,000
Effector Type:	KILR CD16 effectors
Effector Species:	Human
Effector Cell Number/Well:	50,000
Effector to Target Ratio:	10:1
Control Antibody:	anti-hPD-1
Cell Seeding Time (minutes):	30
Antibody Incubation Time (minutes):	30
Antibody Incubation Temperature (°C):	37
Assay Incubation Time (minutes):	240
Assay Incubation Temperature (°C):	37
Incubation with KILR detection reagent (hours):	1
EC₅₀ for Antibody:	14.3
Signal:Background Ratio:	3.7
Max % Lysis:	40

Recommended Culture Conditions: Start cultures at 1×10^5 viable cells/mL. Do not allow the cell density to exceed 3×10^6 cells/mL. Maintain cultures at between 1×10^5 and 1×10^6 viable cells/mL. Add fresh medium every 2-3 days (depending on cell density).

Passage Stability

This cell line has been confirmed to be stable through 15 passages with no significant drop in assay window or change in EC_{50} .

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	KILR [®] Detection Kit	97-0001M
Cell Culture	AssayComplete™ Cell Culture Kit-101	92-3101G
Cell Plating	AssayComplete™ Cell Plating 39 Reagent	93-0563R39A
Cell Detachment	Not Applicable	Not Applicable
Cell Thawing	AssayComplete™ Thawing Reagent T6	92-4106TR
Cell Freezing	AssayComplete™ Freezing Reagent F5	92-5105FR
Ligand Dilution	AssayComplete™ Protein Dilution Buffer	92-0023

*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	0.5	92-0028
AssayComplete™ Hygromycin B	Not Applicable	Not Applicable
AssayComplete™ G418	500	92-0030

Additional Ligand Information

Control Compound: Anti-hPD1

Vendor: Invivogen (Catalog No. hpd1pe-mab1), or equivalent

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