

Raji/Human CD155 Stable Cell Line Development Service Data Sheet

Raji/Human CD155 Stable Cell Line

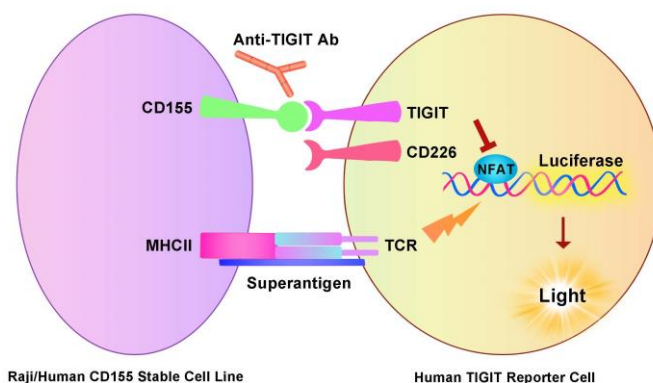
Catalog No.	Size
SCRAJ-STT076	2 × (1 vial contains ~5×10 ⁶ cells)

• Description

The Raji/Human CD155 Stable Cell Line was engineered to express full length human CD155 (Gene ID: 5817), used to mimic cancer target cells. When co-cultured with human TIGIT Reporter Cell, the TIGIT/CD155 interaction inhibits TCR signaling and NFAT-mediated luminescence. Blocking the TIGIT/CD155 interaction by either anti-TIGIT or anti-CD155 antibodies releases the inhibitory signal and results in TCR activation and NFAT-mediated luminescence.

• Application

- Useful for cell-based CD155 binding assay
- Useful as CD155-expressing target cells in reporter gene assay



• Cell Line Profile

Cell line	Raji/Human CD155 Stable Cell Line
Host Cell	Raji
Property	Suspension
Complete Growth Medium	RPMI-1640 + 10% FBS
Selection Marker	Hygromycin B (20 µg/mL)
Incubation	37°C with 5% CO ₂
Doubling Time	16-20 hours
Transduction Technique	Lentivirus

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• *Materials Required for Cell Culture*

- RPMI-1640 (ATCC, Cat.No.30-2001)
- Fetal bovine serum (Gibco, Cat.No.10091-148)
- Hygromycin B (Invitrogen, Cat.No.10687010)
- Complete Growth Medium: RPMI-1640 + 10% FBS
- Culture Medium: RPMI-1640 + 10% FBS, Hygromycin B (20 µg/mL)
- Freeze Medium: 90% FBS, 10% (V/V) DMSO
- T-75 Culture flask (Corning, 430641)
- Cryogenic storage vials (SARSTEDT, 72.379.007)
- Thermostat water bath
- Centrifuge
- Luna cell counter (Logos Biosystems, LUNA-II)
- CO₂ Incubator (Thermo, 3111)
- Biological Safety Cabinet (Thermo, 1389)

• *Recovery*

1. Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the cap out of the water. Thawing should be rapid (approximately 5 minutes).
2. Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by spraying with 70% ethanol. All the operations from this point on should be carried out under strict aseptic conditions.
3. Transfer the vial contents to a centrifuge tube containing 4.0 mL complete growth medium.
4. Count viable cells and spin at approximately 1000 rpm for 5 minutes.
5. Discard the supernatant and resuspend the cell pellet in an appropriate amount of fresh complete growth medium. Adjust the cell density of the suspension to 1×10^6 viable cells/mL and transfer cells to an appropriate size vessel.
6. Incubate at 37°C with 5% CO₂ incubator.

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• *Subculture*

Adjust the cell density at 1×10^5 - 2×10^5 viable cells/mL by the addition of fresh medium or replacement of culture medium. Do not allow the cell density to exceed 2×10^6 cells/mL. T-75 flasks are recommended for subculturing.

- **Medium Renewal:** Add fresh culture medium every 3 to 4 days (depending on cell density)

• *Cryopreservation*

1. Count viable cells and harvest the cell suspension.
2. Centrifuge at 1000 rpm for 5 min at RT and resuspend cells in freezing medium to a concentration of 5×10^6 to 1×10^7 cells/mL.
3. Aliquot into cryogenic storage vials. Place vials in a programmable cooler or an insulated box placed in a -80°C freezer overnight, then transferring to liquid nitrogen storage.

• *Storage*

- **Product format:** Frozen
- **Storage conditions:** Liquid nitrogen immediately upon receipt

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• *Receptor Assay*

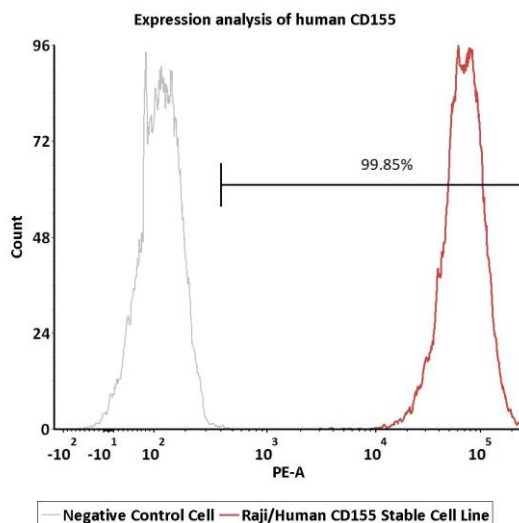


Fig1. Expression analysis of human CD155 on Raji/Human CD155 Stable Cell by FACS. Raji/Human CD155 Stable Cell Line or negative control cell were stained with PE-labeled anti-Human CD155 antibody.

• *Application*

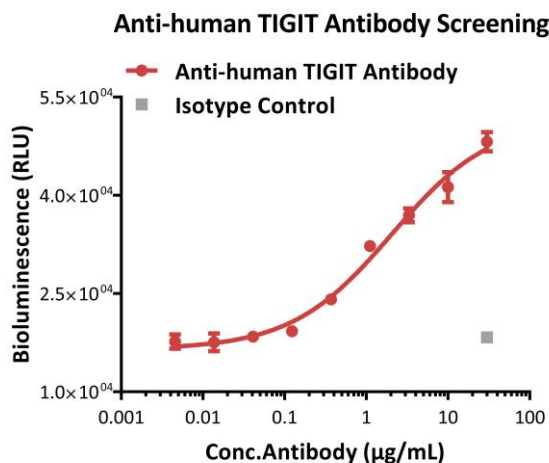
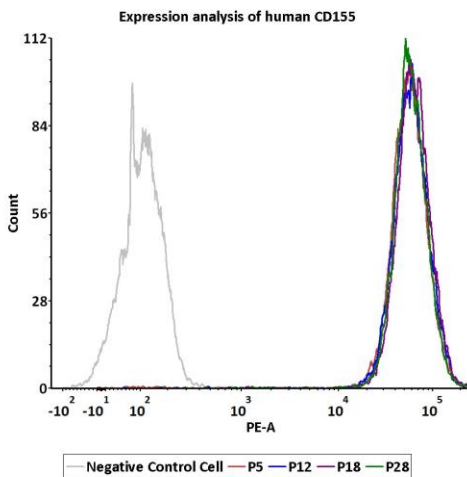


Fig2. Blocking activity of anti-human TIGIT antibody. This Raji/Human CD155 Stable Cell Line was incubated with serial dilutions of antibodies in the presence of reporter cells expressing human TIGIT. The EC50 of anti-human TIGIT antibody was approximately 2.05 µg/mL.

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• Passage Stability



Passage	MFI for CD155 (PE)
P5	54637
P12	57014
P18	60346
P28	55681

Fig3. Passage stability analysis of receptors expression by FACS. Flow cytometry surface staining of human CD155 on Raji/Human CD155 Stable Cell Line demonstrates consistent mean fluorescent intensity across across passage 5-28.

• License Disclosure

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• Related Products

Products

Raji/Human PD-L1 Stable Cell Line Development Service

Cat.No.

SCRAJ-STT075