PRODUCT DATA SHEET

iPSC-Derived Human NK Cell Kit

(African-American, Male Line)

Catalog No. ASE-9285-1 RUO • Rev. 1 I August 2026

Product Overview

Applied StemCell has developed an efficient integration-free method to differentiate high-quality natural killer (NK) cells from human iPSCs. The differentiated NK cells recapitulate key phenotypic and functional characteristics of primary and in vivo NK cells. ASE-9285-1 contains cryopreserved NK cells differentiated from the integration-free control human iPSC line ASE-9211, reprogrammed from dermal fibroblasts of an African-American male donor. These high-purity (≥90%) cells express high levels of the NK cell biomarkers CD56 and CD45 (Figure 1) and demonstrate cytophagosis activity. Optimized NK Cell Culture Media (ASE-9708MM) and NK Cell Media Supplement A (100x) (ASE-9708MM-A) support robust recovery, maintenance, and functionality in culture.

Key Features & Benefits

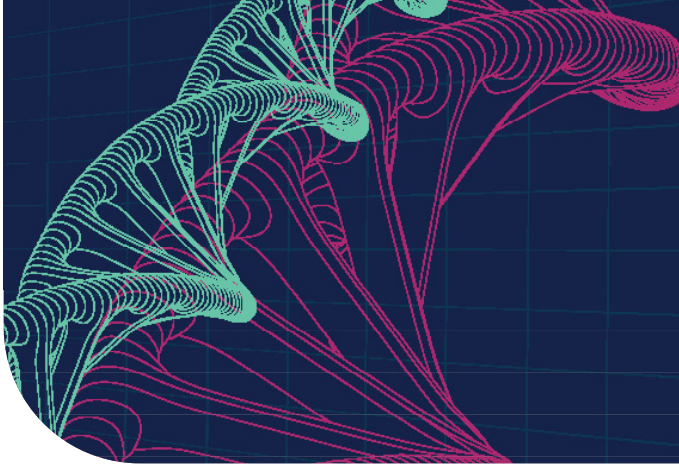
Feature	Benefit
Ready-to-use format	Reduces differentiation setup time and supports faster experimental starts.
High purity (≥90%)	Supports consistent, interpretable assay performance.
Defined donor background	Enables traceable use in disease modeling and comparative studies.
Marker-confirmed phenotype	Documents NK cell identity through CD56 and CD45 expression.
Matched culture medium	Supports recovery, maintenance, and reproducible cell performance.

Applications

- NK cell biology and functional studies
- Control for patient-derived or genome-edited iPSC-derived NK cells
- Disease modeling and comparative studies
- Drug discovery and screening

Product Specifications

Product Type	RUO
Cell Type	Human iPSC-derived natural killer (NK) cells
Parental Line / Background	Control human iPSC line ASE-9211 (Normal, Male, African American, Neonate); dermal fibroblasts; episomal reprogramming; feeder-free culture.
Format	Cryopreserved cell kit
Quantity	≥1 × 10^6 cells/vial
Storage	Ships on dry ice. Cells: liquid nitrogen; culture media and supplement: −20°C.
Shelf Life	12 months for cells and media components when stored as directed. See lot-specific CoA / component labeling.



Quality Control Summary

Each lot is released against the following quality criteria. Lot-specific results are provided on the accompanying Certificate of Analysis (CoA).

- Post-thaw viability, recovery, and growth
- Cell purity: ≥90%
- Phenotype / identity markers: CD45 and CD56
- Mycoplasma and pathogen testing

Supporting Data

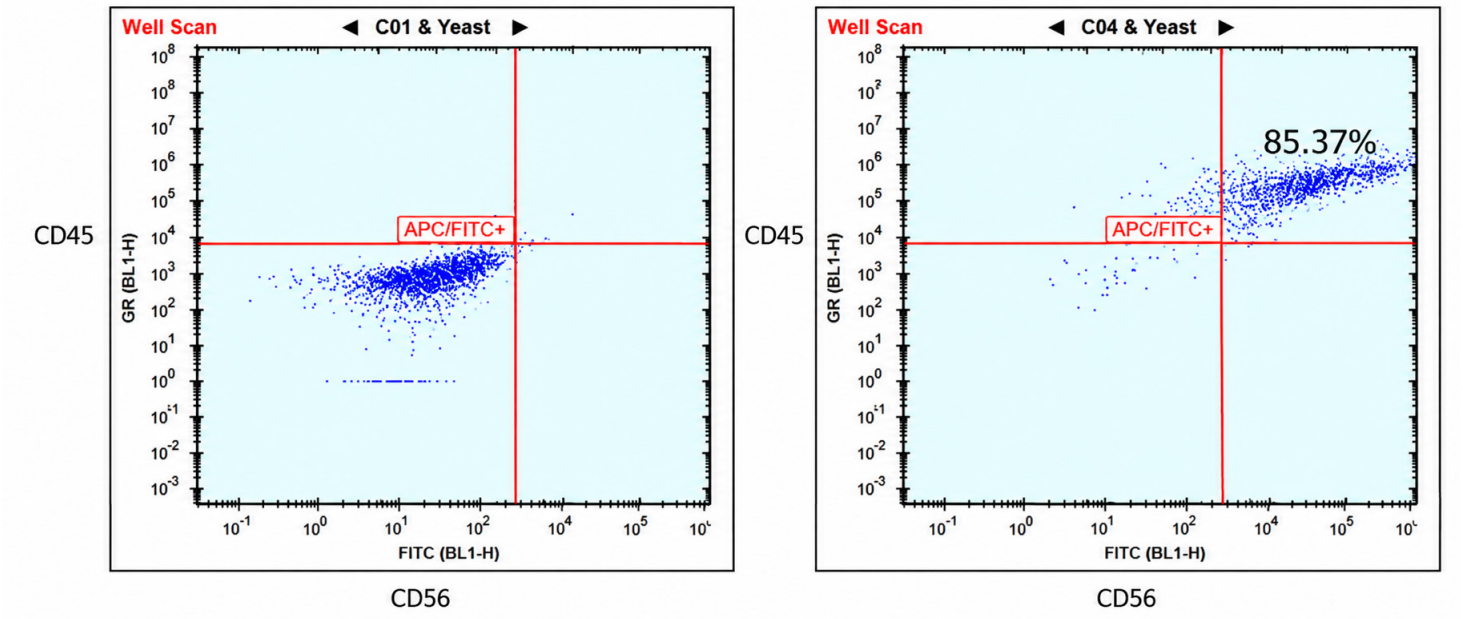
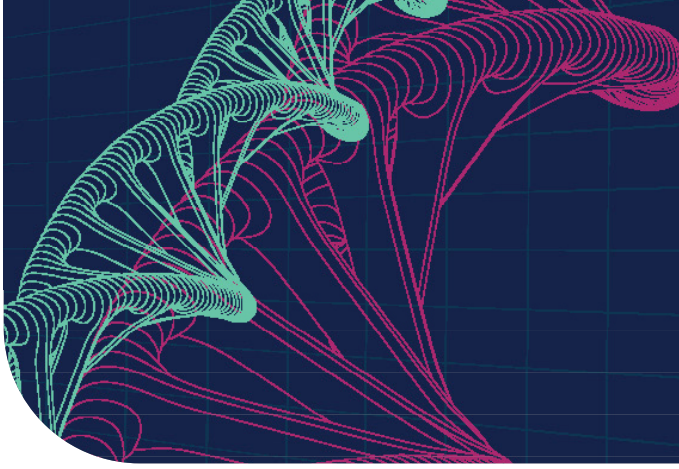


Figure 1. Flow cytometry analysis of ASE-9285-1 iPSC-derived NK cells for NK cell biomarkers. Cryopreserved NK cells differentiated from the Applied StemCell control iPSC line ASE-9211 were recovered in NK cell culture media and stained for the NK cell markers CD45 and CD56 at day 2. Left: isotype control antibodies. Right: CD45/CD56.



Ordering Information

Catalog No.	ASE-9285-1
Description	iPSC-Derived Human NK Cell Kit; African-American Male Line
Format	Kit
Pack Size	1 each

Kit Components

Catalog No.	**ASE-9708-C**
Description	iPSC-Derived Human NK Cells; African-American Male Line
Format	Cells
Pack Size	≥1 × 10^6 cells/vial

Catalog No.	**ASE-9708MM**
Description	NK Cell Culture Media
Format	Media
Quantity	100 mL

Catalog No.	**ASE-9708MM-A**
Description	NK Cell Media Supplement A (100x)
Format	Supplement
Quantity	1 mL

Product Use & Storage

For research use only. Store each component immediately upon receipt under the conditions shown above. Shelf life is contingent on proper storage; refer to component labeling and the lot-specific CoA.

Related Products

- **ASE-9211 – Control human iPSC line (African-American male)**
- **ASE-9720-1 – iPSC-Derived Human T Cell Kit**
- **Contact Applied StemCell for compatible media and related cell models.**



Applied StemCell

Let's advance your research.

Applied StemCell powers your basic, autologous, and allogeneic research and development with 15+ years of iPSC experience, proven GMP know-how, and proprietary TARGATT™ gene editing technology, which takes over where CRISPR/Cas9 ends.

Contact & Ordering

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Ready to accelerate your genome engineering project?

Scan the QR code or visit our website to explore product details, access technical resources, discover related TARGATT™ solutions, and request a consultation with our scientific team.

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© 2026 Applied StemCell, Inc. Inserted constructs must be shown to be expressed in iPSCs or the differentiated cell type.