PRODUCT DATA SHEET

Human iPSCs From Fibroblasts

(Normal, Female, Caucasian, Adult)

Catalog No. ASE-9209 RUO • Rev. 1 | August 2026

Product Overview

Control Human Induced Pluripotent Stem cells (iPSCs) at low passage (p16) provided by Applied StemCell Inc. This iPSC line was generated from normal human skin fibroblasts using an episomal reprogramming method. This method allows the transient expression of human transcription factors (OCT4, SOX2, KLF4, and c-MYC) that initiate the reprogramming process.

The resulting human iPSCs were selected using morphological criteria without the use of either fluorescent markers or drug selection. The ASE-9209 line has been tested for expression of the pluripotency markers OCT4, SOX2, SSEA4, TRA-1-60, and TRA-1-81 (Figure 1) and for a normal female karyotype (Figure 2), and can be used for CRISPR/Cas9 genome editing and for differentiation to somatic lineages in vitro.

Key Features & Benefits

Feature	Benefit
Ready-to-use format	Reduces differentiation setup time and supports faster experimental starts.
Characterized cell identity	Supports consistent, interpretable assay performance.
Defined donor background	Enables traceable use in disease modeling and comparative studies.
Marker-confirmed phenotype	Provides documented identity and quality for each released lot.
Matched culture reagents	Supports recovery, maintenance, and reproducible cell performance.

Applications

- Cell biology research
- Disease modeling
- Assay development
- Drug discovery and screening

Product Specifications

Product Type	RUO
Cell Type	Human iPSC cells
Parental Line / Background	Fibroblasts (Normal, Female, Caucasian, Adult; donor age 47 years)
Format	Cryopreserved cells
Quantity	1×10^6 cells/vial
Storage	Ships on dry ice. Store in liquid nitrogen immediately upon receipt
Shelf Life	Stable for at least 6 months from the date of receipt 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 and recovery/growth
- Colony morphology
- Phenotype / identity markers: OCT4, SOX2, SSEA4, TRA-1-60, TRA-1-81, and alkaline phosphatase (AP) staining
- Karyotype (normal female)
- Mycoplasma and microbial/pathogen testing

Supporting Data

Pluripotency marker analysis

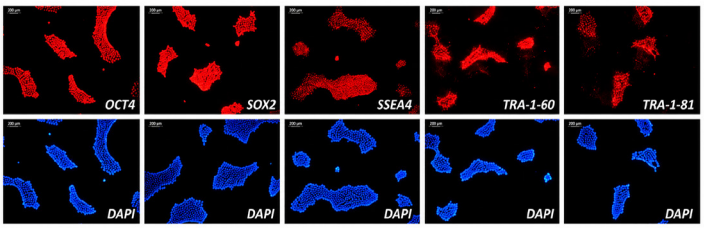


Figure 1. Expression of pluripotency markers. The ASE-9209 iPSC line expresses common iPSC biomarkers (top row: OCT4, SOX2, SSEA4, TRA-1-60, and TRA-1-81). Bottom row: corresponding DAPI nuclear staining. All images were taken at 10x magnification.

Karyotype analysis

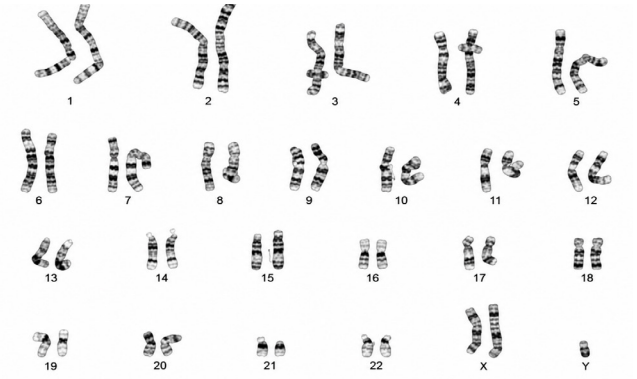


Figure 2. Karyotype analysis to rule out genetic aberrations. Cytogenetic analysis was performed on G-banded metaphase cells from the ASE-9209 iPSC line at passage 15. This iPSC line demonstrates a normal female karyotype.

Teratoma formation

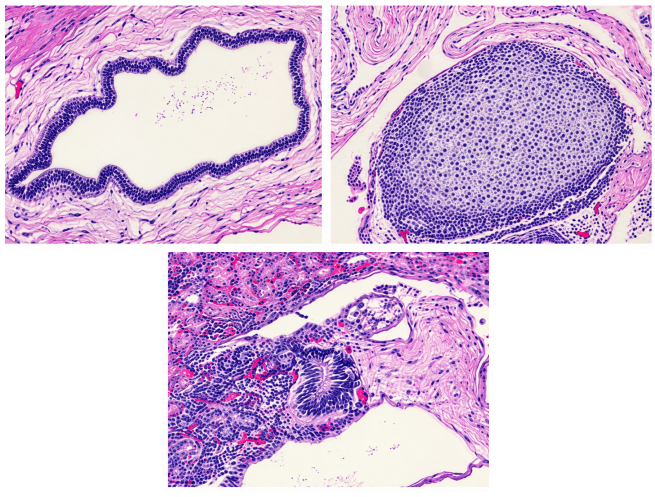


Figure 3. Histological analysis (H&E staining) of kidney and testis teratomas from mice injected with the ASE-9209 iPSC line, showing derivatives of all three germ layers (200x). Left to right: endoderm (EN), gland; mesoderm (ME), cartilage; ectoderm (EC), neuronal rosette.

Differentiation to motor neurons

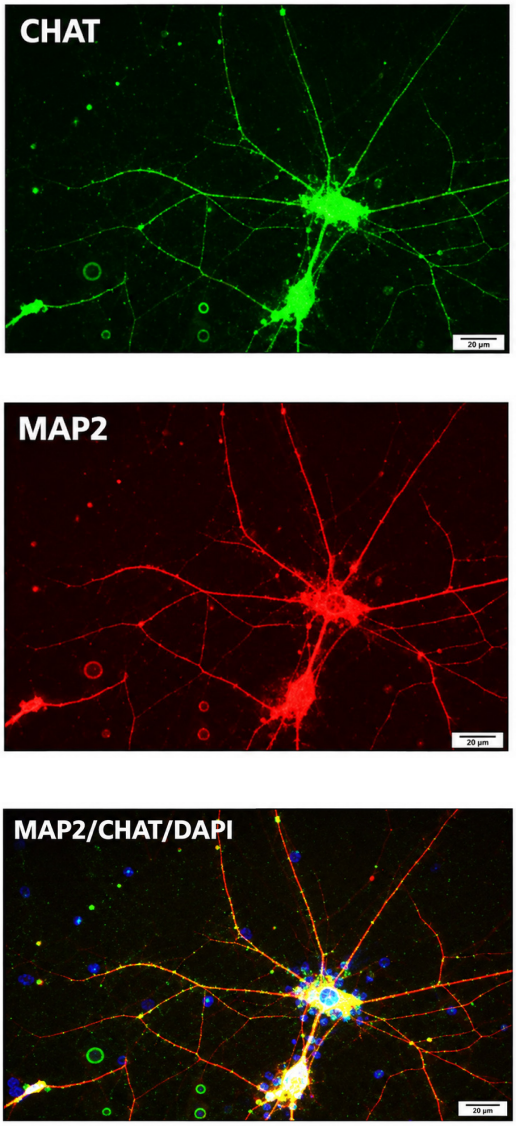


Figure 4. Immunocytochemical staining for the motor neuron marker ChAT and the neuronal marker MAP2 in motor neurons differentiated from the control iPSC line ASE-9209, 7 days post-thaw. DAPI was used for nuclear staining.

CRISPR genome editing in ASE-9209



Figure 5. Next-generation sequencing of pooled clones from control iPSC line ASE-9209 transfected with a gRNA targeting a gene of interest (highlighted) and Cas9 shows indel formation, indicating gRNA-mediated cleavage in this region. WT (Ref Seq): wild-type reference sequence.

Ordering Information

Catalog No.	ASE-9209
Description	Human iPSCs (from Normal, Female, Human Fibroblasts)
Format	Cells
Pack Size	1.0 × 10^6 cells/vial

Related Products

- ASE-9211 – Control human iPSC line (African-American male)
- ASE-9217 – Human iPSCs from PBMCs (Normal, Female, Caucasian, Adult)
- 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.