Applied StemCell

PRODUCT DATA SHEET

iPSC-Derived Cortical Neurons With Media

(African-American, Male Line)

Catalog No. ASE-9741 RUO • Rev. 1 I August 2026

Product Overview

Applied StemCell has developed an efficient integration-free method to differentiate high-quality cortical neurons from human iPSCs. The differentiated cortical neurons recapitulate the phenotype and functional parameters of primary and in vivo cortical neurons. We provide cortical neurons differentiated from an integration-free, control human iPSC line (ASE-9211), reprogrammed from the fibroblasts of an African-American male donor. These high-purity (≥80%) cells express high levels of the cortical neuron biomarker Tuj1 (Figure 1). To harness the full potential of our cortical neurons, we also provide optimized Cortical Neuron Culture Media (ASE-9741MM) that supports robust maintenance and functionality of the cortical neurons in culture.

Key Features & Benefits

Feature	Benefit
Ready-to-use format	Reduces differentiation setup time and supports faster experimental starts.
High purity (80%)	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.

Product Specifications

Product Type	RUO
Cell Type	Human iPSC-derived cortical neurons
Parental Line / Background	Control human iPSC (ASE-9211); p15; Age: Neonate; Gender: Male; Ethnicity: African-American; Tissue Source: Dermal Fibroblasts; Reprogramming Method: Episomal; Culture Conditions: Feeder-free
Genetic Background	No engineered edits specified in source documentation.
Integration System	Not applicable for this iPSC or iPSC-derived cell product.
Payload Capacity	Not applicable.
Format	Cryopreserved cell kit
Storage	Cells: liquid nitrogen; media/ supplements: as labeled (Liq. N_2, −20°C).
Shelf Life	See lot-specific CoA / component labeling.

Applications

- Neuronal development and maturation studies
- Neurotoxicity assessment
- Neurological disease modeling
- Drug discovery and screening

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 recovery and growth
- Post-thaw viability
- Cell purity: ≥80%
- Cortical neuron marker expression
- Mycoplasma and pathogen testing

Supporting Data

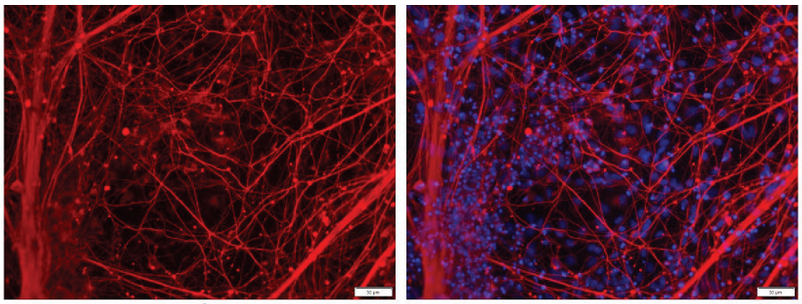


Figure 1. Immunostaining of ASE-9741 iPSC-derived cortical neurons. Cryopreserved cortical neurons differentiated from Applied StemCell's control iPSC line ASE-9211 were stained for the cortical neuron marker Tuj1. Left: Tuj1 (red). Right: merged Tuj1 (red) and DAPI nuclear counterstain (blue). Scale bar: 50 µm.

Kit Components

Item	Component	Format	Quanity
ASE-9740-C	iPSC-derived neural progenitor cells, African-American male line	Cells	≥1 × 10^6 cells/vial
ASE-9740MM	Cortical Neuron Culture Media	Media	100 mL

Ordering Information

Catalog No.	ASE-9741
Description	iPSC-Derived Human Cortical Neuron Kit; African-American Male Line
Format	Kit
Pack Size	1 each

Contact & Ordering

appliedstemcell.com
info@appliedstemcell.com
+1 866.497.4180

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.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Specifications are subject to change; refer to the lot-specific Certificate of Analysis for released values. TARGATT™ and ActiCells™ are trademarks of Applied StemCell, Inc.

© 2026 Applied StemCell
PN: [DS-ASE-9741] Rev. [1]