Applied StemCell

PRODUCT DATA SHEET

iPSC-Derived Dopaminergic Neurons With Media

(African-American, Male Line)

Catalog No. ASE-9742 RUO • Rev. 1 I August 2026

Product Overview

Applied StemCell has developed an efficient integration-free, small molecule-based method to differentiate high-quality dopaminergic (DOPA) neurons from human iPSCs. The differentiated DOPA neurons recapitulate the phenotype and functional parameters of primary and in vivo dopaminergic neurons. We provide dopaminergic 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 (≥70%) cells express high levels of the dopaminergic neuron biomarker TH (Figure 1). To harness the full potential of our DOPA neurons, we also provide optimized DOPA Neuron Basal Media (ASE-9742MM) and DOPA Neuron Supplement (ASE-9742MM-A) that support robust maintenance and functionality of the dopaminergic neurons in culture.

Key Features & Benefits

Feature	Benefit
Ready-to-use format	Reduces differentiation setup time and supports faster experimental starts.
High purity (≥70%)	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 dopaminergic neurons
Parental Line / Background	Control human iPSC line ASE-9211 (passage 15); age: neonate; gender: male; ethnicity: African-American; tissue source: dermal fibroblasts; reprogramming: episomal; culture: 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

- Parkinson's disease modeling
- Neurotoxicity and neuroprotection studies
- Neuronal phenotype and function studies
- 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 viability and recovery/growth
- Cell purity: ≥70%
- Phenotype / identity markers: Otx2, Nestin and Corin (precursor); TH (mature neurons)
- Mycoplasma and pathogen testing

Supporting Data

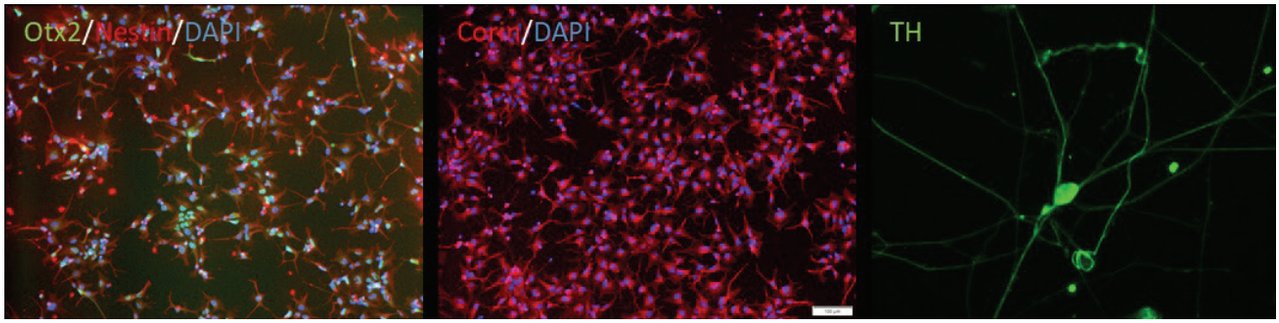


Figure 1. Immunostaining of ASE-9742 dopaminergic neurons derived from the human iPSC control line ASE-9211. Dopaminergic neuron precursors (provided separately) were identified by Otx2, Nestin and Corin (left and middle); mature dopaminergic neurons were identified by TH (right).

Kit Components

Item	Component	Format	Quanity
ASE-9742-C	iPSC-Derived Dopaminergic Neurons; African-American Male Line	Cells	≥1 × 10^6 cells/vial
ASE-9742MM	DOPA Neuron Basal Media	Media	100 mL
ASE-9742MM-A	DOPA Neuron Supplement	Supplement	1 mL

Ordering Information

Catalog No.	ASE-9742
Description	iPSC-Derived Human Dopaminergic Neuron Kit; African-American Male Line
Format	Kit
Pack Size	1 each

Product Use & Storage

For research or further manufacturing purposes 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.

Contact & Ordering

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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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