N2 Supplement-A

For Neural and Pancreatic Differentiation of Mouse and Human ES and iPS cells

Catalog # 07152 5 mL

STEMCELL™ TECHNOLOGIES
Scientists Helping Scientists™ | WWW.STEMCELL.COM
TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713
INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM
FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

Product Description

This product has been developed as a media supplement recommended for use in the in vitro differentiation of human or mouse embryonic stem (ES) cells and induced pluripotent stem (iPS) cells to neural and pancreatic-like cell types. May be suitable for other applications.

N2 Supplement-A may be purchased separately or as a component of the BrainPhys™ Neuronal Medium and N2-A/SM1 Kit (Catalog #05793).

Properties

Storage: Store at -20°C.

Shelf Life: Stable until expiry date (EXP) on label.

Contains: 100X stock solution of N2 Supplement-A with the following in phosphate-buffered saline (PBS):
- Recombinant human insulin
- Human transferrin (iron-saturated)
- Sodium selenite
- Putrescine
- Progesterone

This product contains components derived from human plasma. Donors have been tested and found negative for hepatitis B surface antigen (HBsAg) and HIV-1 antibodies and/or HIV-1 antigen. However, this product should be considered potentially infectious and treated in accordance with universal handling precautions.

Materials Required But Not Included

- ES-Cult™ Basal Medium-A (Catalog #05801)

Handling / Directions For Use

For differentiation of human ES or iPS-derived neural progenitor cells to neurons, please refer to the Product Information Sheet (PIS) for BrainPhys™ (Document #DX20519), available on our website at www.stemcell.com or contact us to request a copy.

NOTE: Protect N2 Supplement-A from prolonged exposure to light.

PREPARATION OF COMPLETE ES-CULT™ MEDIUM (FOR DIFFERENTIATION OF MOUSE ES OR iPS CELLS)

1. Thaw N2 Supplement-A at room temperature (15 - 25°C) for 1 hour. Mix well.
   NOTE: Once thawed, use supplement immediately or aliquot and store at -20°C. Do not exceed the shelf life of the supplement.
2. Add 5 mL of N2 Supplement-A to 500 mL of ES-Cult™ Basal Medium-A (Catalog #05801).
   NOTE: If not used immediately, store complete ES-Cult™ Medium at 2 - 8°C for up to 2 weeks.

References

Lee S-HH et al. (2000) Efficient generation of midbrain and hindbrain neurons from mouse embryonic stem cells. Nat Biotechnol 18(6): 675–9.
Lumelsky N et al. (2001) Differentiation of embryonic stem cells to insulin-secreting structures similar to pancreatic islets. Science 292(5520): 1389–94.