STEMdiff™ Neural Induction Medium

Defined, serum-free induction medium for neural differentiation of human ES and iPS cells

Catalog #05835	250 mL
Catalog #05839	2 x 250 mL

STEMCELL™ TECHNOLOGIES
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Product Description

STEMdiff™ Neural Induction Medium is a defined, serum-free medium for neural differentiation of human embryonic stem (ES) cells and induced pluripotent stem (iPS) cells. This medium is compatible with both embryoid body and monolayer culture neural induction protocols.

Properties

Storage: Store at -20°C.

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

This product contains material derived from human plasma. Donors have been tested and found negative for HIV-1 and -2, hepatitis B, and hepatitis C prior to donation. However, this product should be considered potentially infectious and treated in accordance with universal handling precautions.

Handling / Directions for Use

Thaw STEMdiff™ Neural Induction Medium at room temperature (15 - 25°C) or overnight at 2 - 8°C.

NOTE: Once thawed, use immediately or store at 2 - 8°C for up to 2 weeks. Alternatively, aliquot and store at -20°C. After thawing the aliquots, do not re-freeze.

For complete instructions on neural differentiation using STEMdiff™ Neural Induction Medium, refer to the Technical Manual: Generation and Culture of Neural Progenitor Cells using the STEMdiff™ Neural System (Document #28782), available on our website at www.stemcell.com or contact us to request a copy.

Assessment of Neural Induction

Antibodies for PAX6, SOX1, and Nestin (e.g. Anti-Human Nestin Antibody, Clone 10C2; Catalog #60091) can be used alone or in combination to evaluate the phenotype of neural progenitor cells during neural induction. STEMdiff™ Human Neural Progenitor Antibody Panel (Catalog #69001) provides primary antibodies that are immunoreactive toward marker proteins highly expressed either by neural progenitor cells (Nestin, PAX6, SOX1) or by undifferentiated human ES and iPS cells (OCT4/OCT3). To determine the presence of potentially contaminating neural crest cells, anti-SOX10 or anti-CD271 antibodies can be used. Additionally, Anti-Beta-Tubulin III Antibody, Clone TUJ1 (Catalog #60052) can be used to evaluate premature neuronal differentiation. For evaluating neural induction, the optimal timepoint for assessment is between days 10 - 12 for the EB protocol or days 6 - 7 for the monolayer protocol (for complete protocols, refer to the Technical Manual; Document #28782). Results may vary depending on cell line used.

Related Products

For related products, including specialized cell culture and storage media, supplements, antibodies, cytokines, and small molecules, visit www.stemcell.com/hPSCNCworkflow or contact us at techsupport@stemcell.com.