

# NeuroCult™-XF Proliferation Medium

**Xeno-free medium for expansion of human neural stem and progenitor cells**

Catalog #05761      500 mL



Scientists Helping Scientists™ | [WWW.STEMCELL.COM](http://WWW.STEMCELL.COM)

TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

[INFO@STEMCELL.COM](mailto:INFO@STEMCELL.COM) • [TECHSUPPORT@STEMCELL.COM](mailto:TECHSUPPORT@STEMCELL.COM)

FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

## Product Description

NeuroCult™-XF Proliferation Medium is a standardized, xeno-free, serum-free medium for the culture of human neural stem and progenitor cells as neurospheres. NeuroCult™-XF Proliferation Medium must be supplemented with appropriate cytokines (not included). The complete medium (containing appropriate cytokines) has been optimized to maintain human neural stem cells for extended periods of time without the loss of their self-renewal, proliferation, or differentiation potential.

## Product Information

The following components are sold as a complete kit (Catalog #05761) and are not available for individual sale.

COMPONENT NAME	COMPONENT #	SIZE	STORAGE	SHELF LIFE
NeuroCult™-XF Basal Medium*	05760	450 mL	Store at 2 - 8°C.	Stable until expiry date (EXP) on label.
NeuroCult™-XF Proliferation Supplement*	05763	50 mL	Store at -20°C.	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.

## Preparation of Complete NeuroCult™-XF Proliferation Medium

Use sterile techniques to prepare complete NeuroCult™-XF Proliferation Medium (Basal Medium + Proliferation Supplement). The following example is for preparing 500 mL of complete medium. If preparing other volumes, adjust accordingly.

1. Thaw NeuroCult™-XF Proliferation Supplement in a 37°C water bath. Mix thoroughly.

NOTE: A white precipitate may form upon storage at -20°C. The precipitate will disappear after complete thawing at 37°C and mixing the contents well.

NOTE: Once thawed, use immediately or aliquot and store at -20°C. Do not exceed the expiry date as indicated on the label. After thawing the aliquots, use immediately. Do not re-freeze.

2. Add 50 mL of Proliferation Supplement to 450 mL of Basal Medium. Mix thoroughly.

NOTE: If not used immediately, store complete NeuroCult™-XF Proliferation Medium (without added cytokines) at 2 - 8°C for up to 1 month.

3. Cytokines are not included in the Basal Medium or Proliferation Supplement and should be added immediately before use, along with heparin. The following additions are recommended:

- 20 ng/mL Human Recombinant EGF (Catalog #78006)
- 10 ng/mL Human Recombinant bFGF (Catalog #78003)
- 2 µg/mL Heparin Solution (Catalog #07980)

NOTE: Heparin Solution contains animal-derived components and can be omitted if a complete xeno-free system is desired. To provide a complete xeno-free system, human serum albumin can be added during preparation of the cytokines to increase stability.

NOTE: Avoid repeated exposure of medium to room temperature and light during experiments. This product does not contain antibiotics. If desired, add antibiotics and use medium within 1 week.

## Directions for Use

For complete instructions on culturing human neural stem and progenitor cells with NeuroCult™-XF Proliferation Medium, refer to the Technical Manual: In Vitro Proliferation and Differentiation of Human Neural Stem and Progenitor Cells Using NeuroCult™ or NeuroCult™-XF (Document #28724), available at [www.stemcell.com](http://www.stemcell.com) or contact us to request a copy.

NeuroCult™ media are sold under license from StemCells California, Inc. US Patent Nos. 5,750,376; 5,851,832; 5,980,885; 5,968,829; 5,981,165; 6,071,889; 6,093,531; 6,103,530; 6,165,783; 6,238,922.

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485. PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Copyright © 2017 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, Scientists Helping Scientists, and NeuroCult are trademarks of STEMCELL Technologies Canada Inc. All other trademarks are the property of their respective holders. While STEMCELL has made all reasonable efforts to ensure that the information provided by STEMCELL and its suppliers is correct, it makes no warranties or representations as to the accuracy or completeness of such information.