

# NeuroCult™ NS-A Proliferation Kit (Human)



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

Catalog #05751

1 Kit

## Product Description

NeuroCult™ NS-A Proliferation Kit (Human)\* is a standardized, serum-free medium for the in vitro culture and expansion of human neural stem and progenitor cells. NeuroCult™ NS-A Proliferation Kit (Human) must be supplemented with appropriate cytokines (not included). The complete medium (containing cytokines) has been optimized to maintain human neural stem cells in culture for extended periods of time without the loss of their self-renewal, proliferation, or differentiation potential.

## Product Information

COMPONENT NAME	COMPONENT #	SIZE	STORAGE	SHELF LIFE
NeuroCult™ NS-A Basal Medium (Human)	05750	450 mL	Store at 2 - 8°C.	Stable until expiry date (EXP) on label.
NeuroCult™ NS-A Proliferation Supplement (Human)**†	05753	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.

†This component is sold as part of NeuroCult™ NS-A Proliferation Kit (Human; Catalog #05751) and is not available for individual sale. Components of NeuroCult™ NS-A Proliferation Supplement (Human) are pretested and selected to support the growth and expansion of human neural stem and progenitor cells when combined with NeuroCult™ NS-A Basal Medium (Human). Cytokines are not included.

## Preparation of Complete NeuroCult™ NS-A Proliferation Medium (Human)

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

NOTE: Cytokines are not included in the medium or the supplement and must be added separately. This product does not contain antibiotics. If desired, add penicillin and streptomycin, and use medium within 1 week.

1. Thaw NeuroCult™ NS-A Proliferation Supplement (Human) at 37°C. Mix thoroughly.

NOTE: Once thawed, use immediately or aliquot and store at -20°C. Do not exceed the shelf life of the supplement. Do not freeze-thaw more than twice.

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. This will not affect performance.

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

NOTE: If not used immediately, store at 2 - 8°C for up to 1 month. Avoid repeated exposure of medium to room temperature (15 - 25°C) and light during experiments.

3. Add cytokines. STEMCELL Technologies recommends adding:

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

NOTE: If not used immediately, store complete NeuroCult™ NS-A Proliferation Medium (Human) at 2 - 8°C for up to 1 week.

## Directions for Use

For complete instructions on culturing human neural stem and progenitor cells with NeuroCult™ NS-A Proliferation Kit (Human), 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.

\* 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 © 2019 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.