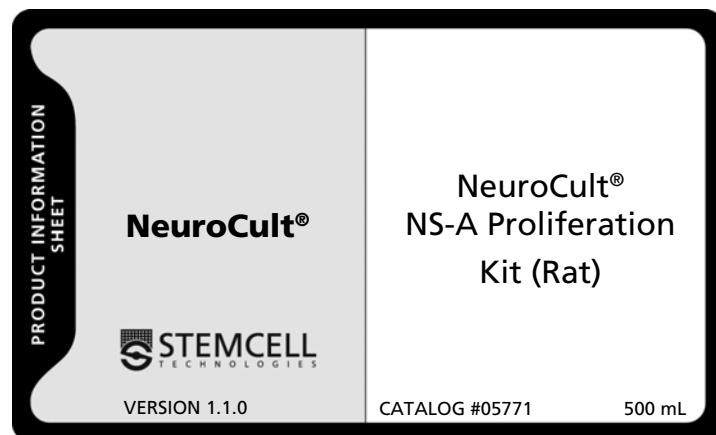


## PRODUCT DESCRIPTION

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



## COMPONENTS, STABILITY AND STORAGE

COMPONENT #	DESCRIPTION	UNIT SIZE	STORAGE CONDITIONS
05770	NeuroCult® NS-A Basal Medium (Rat) <sup>†</sup>	450 mL	Product stable at 2 - 8°C until expiry date as indicated on label.
05773	NeuroCult® NS-A Proliferation Supplements (Rat) <sup>‡</sup>	50 mL	Product stable at -20°C until expiry date as indicated on label. Storage of 10 mL aliquots at -20°C is possible; do not freeze-thaw more than twice. Storage at 2 - 8°C is not recommended. <i>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.</i>

<sup>†</sup> NeuroCult® NS-A Basal Medium (Rat) must be used with supplements suitable for the desired cell culture application: NeuroCult® NS-A Proliferation Supplements (Rat; Component #05773, included in the kit) and desired cytokines or NeuroCult® NS-A Differentiation Supplements.

<sup>‡</sup> Components of NeuroCult® NS-A Proliferation Supplements (Rat) are pretested and selected to support the growth and expansion of rat neural stem and progenitor cells when combined with NeuroCult® NS-A Basal Medium (Rat). Cytokines are not included.

The components are biological reagents, which contain no serum and as such are considered chemically characterized.

This product has been aseptically manufactured using tightly controlled processes and is sterility tested.

## DIRECTIONS FOR USE

### Preparation of Complete NeuroCult® NS-A Proliferation Medium (Rat)

For complete instructions on culturing rat neural stem and progenitor cells with the NeuroCult® NS-A Proliferation Kit (Rat), please refer to the Technical Manual for *In Vitro* Proliferation and Differentiation of Rat Neural Stem and Progenitor Cells (Neurospheres) Using NeuroCult® (Manual Catalog #28725) available on our website at [www.stemcell.com/technical/manuals.aspx](http://www.stemcell.com/technical/manuals.aspx) or contact us to request a copy.

*After NeuroCult® NS-A Proliferation Supplements have been added to NeuroCult® NS-A Basal Medium storage at 2 - 8°C is recommended for no more than 1 month. Avoid repeated exposure of medium to room temperature and light during experiments.*

1. Add the entire bottle (50 mL) of NeuroCult® NS-A Proliferation Supplements (Rat; Component #05773) to 450 mL NeuroCult® NS-A Basal Medium (Rat; Component #05770) (1/10 dilution).

OR

Dilute NeuroCult® NS-A Proliferation Supplements (Rat) 1/10 with NeuroCult® NS-A Basal Medium (Rat). For example, prepare 10 mL by adding 1 mL NeuroCult® NS-A Proliferation Supplements (Rat) to 9 mL NeuroCult® NS-A Basal Medium (Rat).

2. Cytokines are not included in the medium or supplements and must be added. STEMCELL Technologies recommends:
  - 20 ng/mL rh EGF (Catalog #02633)
  - 10 ng/mL rh bFGF (Catalog #02634)
  - 2 µg/mL Heparin (Catalog #07980)

*Following the addition of cytokines, Complete NeuroCult® NS-A Proliferation Medium (Rat) should be stored for no more than 1 week.*

This product does not contain antibiotics. If desired, add 5 mL Penicillin and Streptomycin Solution (Catalog #07500) to 500 mL medium to achieve a final concentration of 100 U/mL Penicillin and 100 µg/mL Streptomycin. Following addition of antibiotics, medium should be used within 1 week.

Refer to Material Safety Data Sheet for additional information.

\* 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.



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