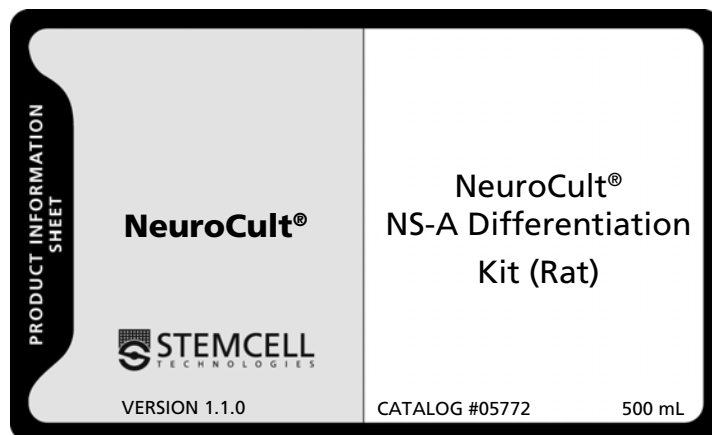


PRODUCT DESCRIPTION

The NeuroCult® NS-A Differentiation Kit (Rat)* is a standardized medium for the differentiation of rat neural stem and progenitor cells into astrocytes, neurons and oligodendrocytes.



COMPONENTS, STABILITY AND STORAGE

COMPONENT #	DESCRIPTION	UNIT SIZE	STORAGE CONDITIONS
05770	NeuroCult® NS-A Basal Medium (Rat) [†]	450 mL	Product stable at 2 - 8°C until expiry date as indicated on label.
05774	NeuroCult® NS-A Differentiation Supplements (Rat) [‡]	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>

[†] NeuroCult® NS-A Basal Medium (Rat) must be used with supplements suitable for the desired cell culture application: NeuroCult® NS-A Differentiation Supplements (Rat; Component #05774, included in the kit) or NeuroCult® NS-A Proliferation Supplements (Rat; Component #05773) and appropriate cytokines. The components are biological reagents, which contain no serum and as such are considered chemically characterized.

[‡] Components of NeuroCult® NS-A Differentiation Supplements (Rat) are prescreened and selected to support the differentiation of rat neural stem and progenitor cells into astrocytes, neurons and oligodendrocytes when combined with NeuroCult® NS-A Basal Medium (Rat). This component is a biological reagent that contains serum, and as such cannot be completely characterized or quantified. Some variability is unavoidable.

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

DIRECTIONS FOR USE

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

Add the entire bottle (50 mL) of NeuroCult® NS-A Differentiation Supplements (Rat; Component #05774) to 450 mL NeuroCult® NS-A Basal Medium (Rat; Component #05770) (1/10 dilution).

Complete NeuroCult® NS-A Differentiation Medium (Rat) is stable at 2 - 8°C for one month. Avoid repeated exposure of medium to room temperature and light during experiments. If less than 500 mL medium will be required, smaller volumes can be prepared by diluting NeuroCult® NS-A Differentiation Supplements (Rat) 1/10 with NeuroCult® NS-A Basal Medium (Rat). For example, prepare 10 mL Complete NeuroCult® NS-A Differentiation Medium (Rat) by adding 1 mL NeuroCult® NS-A Differentiation Supplements (Rat) to 9 mL NeuroCult® NS-A Basal Medium (Rat).

For complete instructions on culturing rat neural stem and progenitor cells with the NeuroCult® NS-A Differentiation 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 or contact us to request a copy.

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.