

agsNSC™ Basal Medium Specification Sheet



agsNSC Basal Medium

agsNSC Basal Medium is a new serum-free medium optimized for the culture of Arctic Ground Squirrel Neural Stem Cells (agsNSC). agsNSC Basal Medium supports the growth of these cells in a serum-free environment over a period of at least 2 passages followed by differentiation into neurons. agsNSC Basal Medium will support the expansion of the agsNSC when supplemented with B-27™ (Invitrogen) and rh FGF-basic. When supplemented with ITS-*p*, agsNSC Basal Medium will support differentiation of the agsNSC. agsNSC Basal Medium contains no antimicrobials; components that can cause cell stress and “masking effects” that may influence experimental results. (Lifeline offers these traditional supplements; however these are not needed, or recommended, to achieve optimal cell performance.)

agsNSC Culture Medium Components

agsNSC medium is offered in a kit format composed of basal medium and associated supplements and growth factors called “LifeFactors®.” This kit allows you to prepare fresh medium in your laboratory, extending shelf life and enhancing performance.

agsNSC Basal Medium is provided in a light-protected 500 mL bottle. The remaining LifeFactors (growth factors and supplements) are packaged in a convenient gas-impermeable pouch for easy storage.

Product	Part No.	Volume	Usage/Comments	Concentrations in Supplemented Medium	Storage
agsNSC Expansion Kit	LL-0008		Kit includes: LM-0003 (1), LS-1026		
agsNSC Basal Medium	LM-0003	500 mL			2-8°C
agsNSC Expansion LifeFactors Kit	LS-1026		Kit includes: LS-1025, LS-1012, CM-0014, B-27		-20°C
rh FGF-basic	LS-1025	1.0 mL	Expansion Medium Growth Factor	40 ng/mL	-20°C
FBS	LS-1012	10 mL	For neutralization of trypsin		-20°C
Poly-L-Ornithine	CM-0014	25 mL	10 µg/mL to coat plates/flasks for expansion		-20°C
B27 (Invitrogen)	N/A	10 mL	Expansion Medium Growth Factor		-20°C
agsNSC Differentiation Kit	LL-0009	Kit	Kit includes: LM-0003, LS-1027		
agsNSC Basal Medium	LM-0003				2-8°C
ITS- <i>p</i>	LS-1027	5 mL	Differentiation Medium Growth Factor	10 µg/mL rh Insulin 5.5 µg/mL Transferrin 0.2 µM Selenium 1.0 mM pyruvate	-20°C
Complete agsNSC Expansion/Differentiation Kit	LL-0006		Kit includes all the products listed above: LM-0003 (2), LS-1027, LS-1026		
agsNSC Maintenance Kit	LL-0012		Kit includes: LS-1024, B-27, LM-0005 NeuraLife™ Basal Medium		
Additional Items:				Concentrations of Supplement	Storage
BD Brand 96-well Poly-L-Lysine Coated Plates	354516 (BD)	Pack of 5	Required for cell plating		4-30°C
BD Brand 6-well Poly-L-Lysine Coated Plates	354515 (BD)	Pack of 5	Required for cell plating		4-30°C
0.05% Trypsin/0.02% EDTA	CM-0017	100 mL			-20°C
Penicillin, Streptomycin and Amphotericin B	LS-1011	1.0 mL		Penicillin 10,000 Units/mL Streptomycin 10,000 µg/mL Amphotericin B 25 µg/mL	-20°C

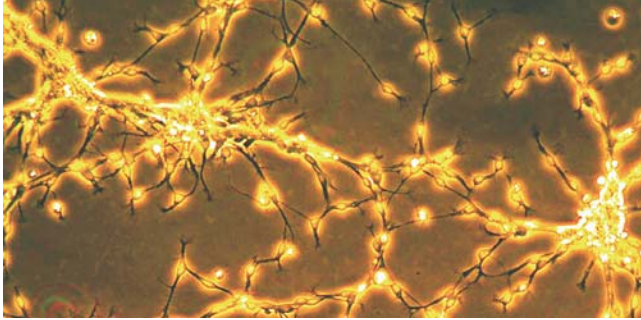
B-27 is a registered mark of Invitrogen Corporation. B27 may not be sold separately.

To place an order, please visit lifelinecelltech.com or call technical and customer service at 877.845.7787.

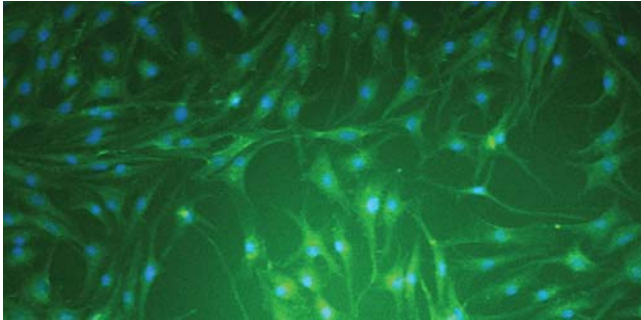
Quality Testing for Guaranteed Consistency and Reproducible Results

Lifeline Cell Technology manufactures products using the highest quality raw materials and incorporates ISO style quality assurance in every production run. Exacting standards and production procedures ensure lot-to-lot consistency. Every production lot of agsNSC™ Basal Medium is extensively tested using agsNSC.

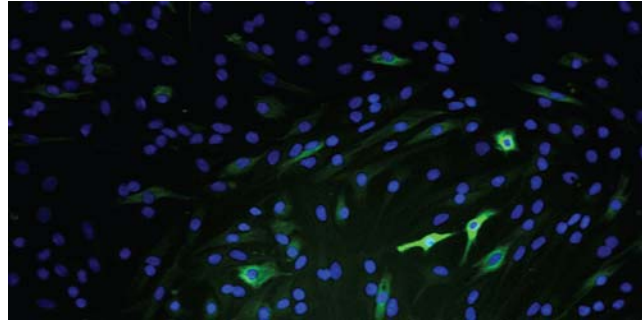
- Sterility Testing Negative for bacteria and fungal growth
- pH 7.4 +/- 0.2
- Cell Testing Appropriate morphology and ability to differentiate into neurons (beta tubulin (TUJ1)+
- Osmolality 325 +/- 10 mOsm
- Endotoxin < 0.5 EU/mL



Adult hippocampal neural stem cells derived from Arctic Ground Squirrels (AGS).



AGS neural stem cells >95% nestin+



AGS neural stem cells <4% GFAP+ (minimal astrocytes)

The Lifeline® Guarantee

Lifeline's rigorous quality control ensures sterility and performance to standardized testing criteria. If Lifeline's products do not meet your expectations or our posted performance and quality standards, we will replace them at no charge or provide a full refund. Upon request, Lifeline will provide lot-specific QC test results, material safety data sheets and certificates of analysis. See complete guarantee/warranty statement at lifelinecelltech.com or contact your Lifeline representative for more information.

Innovative Packaging Features

Lifeline has made significant improvements to traditional medium packaging.

- The specially designed shrink label works as a light barrier to help protect medium from light damage.
- A temperature gauge, built into the package, assists in contamination-free medium warming.
- A barrier sleeve helps protect the medium from contaminants found in the water bath.
- Lifeline is an environmentally friendly company. Our cell culture media bottles are recyclable and we ship all products with biodegradable packing material.

Safety Statement

This product is for Research Use Only. This product is not approved for human or veterinary use, or for use in *in vitro* diagnostics or clinical procedures.

Call Lifeline Technical Service and Sales at 877.845.7787
or visit lifelinecelltech.com for more information

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