

Adult Hippocampal Arctic Ground Squirrel Neural Stem Cells Specification Sheet

Adult Hippocampal Arctic Ground Squirrel Neural Stem Cells (agsNSC™) are isolated from the hippocampus of adult Arctic Ground Squirrels following hibernation. Both the isolated cells and the whole animals are tolerant of ischemic insult and reperfusion. Using these cells, researchers can identify potentially novel proteins and genes key to neuronal tolerance, neuroprotection and neurogenesis. Lifeline's agsNSC can be used to screen drugs, genes and proteins for protective changes caused by oxygen and/or glucose deprivation. These agsNSC could identify future targets for novel stroke therapeutics. As stem cells, these cells can be used in transplantation studies using rodent stroke models to investigate tolerance to ischemic injury.

Lifeline's agsNSC are provided as quality tested frozen cultures. Also available are Lifeline's specially formulated basal medium and supplements (Part no. LL-0008) for the growth and differentiation of the agsNSC. The cells can be differentiated into neuronal monolayers containing few astrocytes using Lifeline's Expansion/Differentiation Kit (Part no. LL-0006).

CELL FEATURES:

- agsNSC are cryopreserved in early passage.
- Lifeline's undifferentiated agsNSC can be passaged at least twice before differentiation.
- Lifeline's guarantee of performance and quality.

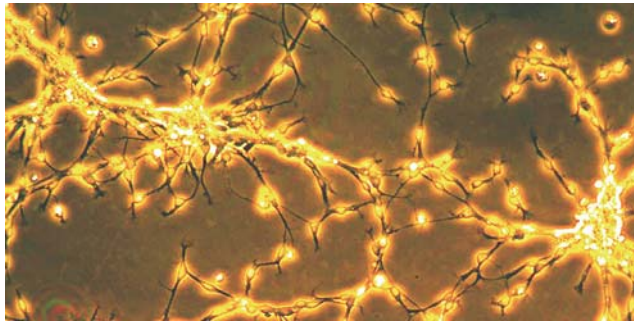
Quality Testing for Guaranteed Consistency and Reproducible Results

Lifeline Cell Technology manufactures products using the highest quality raw materials and incorporates extensive quality assurance in every production run. Exacting standards and production procedures ensure consistent quality.

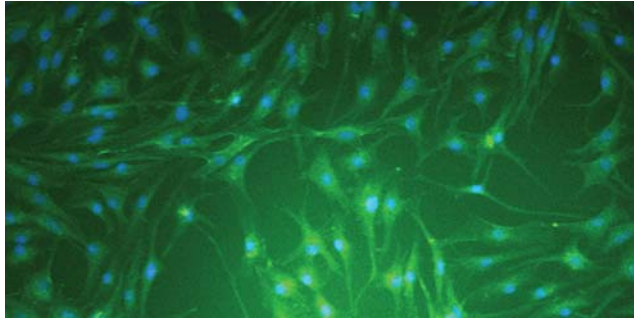
Hippocampal Arctic Ground Squirrel Neural Stem Cells Are Tested For:

• Cell Count	400,000 cryopreserved cells per vial
• Morphology	Normal NSC morphology
• Cell Viability	Minimum 60% viability when thawed from cryopreservation
• Sterility Testing	Negative for mycoplasma, bacterial and fungal growth
• Cell Growth	Maintain normal morphology in expansion medium and differentiate into neurons in differentiation medium

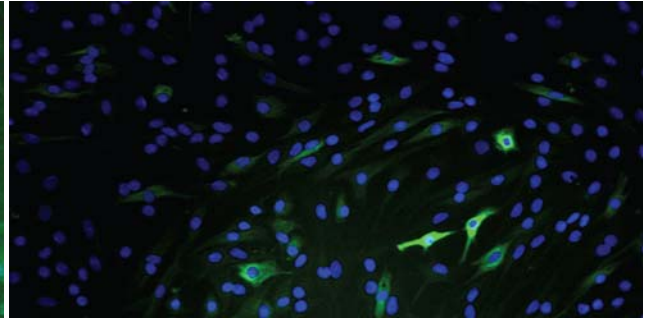
To place an order, please visit lifelinecelltech.com or call technical and customer service at 877.845.7787.



Adult hippocampal neural stem cells derived from arctic ground squirrels (agsNSC).



agsNSC >95% positive for nestin



agsNSC <4% positive for 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.

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* diagnostic or clinical procedures. Lifeline recommends storing cryopreserved vials in liquid nitrogen vapor phase. Handle cryopreserved vials with caution. Always wear eye protection and gloves when working with cell cultures. Aseptically vent any nitrogen from cryopreserved vials in a biosafety cabinet prior to thawing the vials in a water bath. If vials must be stored in liquid phase, the vials should be transferred to vapor phase storage or -80°C for at least 24 hours prior to being thawed.

Product Information:	
Part #	Description
FC-0004	agsNSC™, 400,000 cryopreserved cells per vial
LL-0006	agsNSC Expansion/Differentiation Kit LM-0003 agsNSC™ Basal Medium (LL-0006 contains 2 (two) 500 mL bottles) LS-1026 agsNSC Expansion LifeFactors® Kit LS-1027 ITS- <i>p</i> (for differentiation)
LL-0008	agsNSC Expansion Kit LM-0003 agsNSC Basal Medium LS-1026 agsNSC Expansion LifeFactors Kit
LL-0009	agsNSC Differentiation Kit LM-0003 agsNSC Basal Medium LS-1027 ITS- <i>p</i>
LL-0012	agsNSC Maintenance Kit LM-0005 NeuraLife™ Medium LS-1024 L-Glutamine B-27™ (Invitrogen)

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

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

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