Technical data sheet

NC-27 Supplement 50x

AC-AP-0020	5 ml
AC-AP-0021	10 ml
AC-AP-0022	20 ml
AC-AP-0023	50 ml
AC-AP-0024	100 ml

Description:

NC-27 Supplement is a serum-free supplement for neuronal cell cultures
and is suitable for the long-term growth and viability of hippocampal and other neurons of the central nervous (CNS) and peripheral nervous system (PNS).
Its defined formulation contains vitamins, hormones and other growth factors including insulin, human transferrin, catalase, antioxidants and fatty acids.

Applications:

- Differentiation of ES cells into neuron lineage (neuron and astrocytes)
- Differentiation of neuronal stem cells into astrocytes and neurons
- Optimal growth and long-term survival of rat hippocampal neurons (fetal and adult)
- Survival of neurons from embryonic rat striatum, substantia nigra, septum and cortex, and neonatal rat cerebellum (fetal and adult)

Composition:

NC-27 Supplement is a serum substitute of defined composition containing albumin, insulin, transferrin, lipids and hormones. It is used as a supplement to NC-Basal media (AC-AP-0030) to support growth and survival of neuronal cells from the central nervous system.

Spezifikation

Form	liquid
Sterility	sterile
Concentration	50 X
Shelf life	18 months
serafree	yes
Storage	-20°C
Cell type	neuronal cells

Use:

NC-27 Supplement is a 50-fold concentrate. Dilute NC-27 Supplement into the basal media 1 : 50.
The final concentration of NC-27 Supplement corresponds to 1x.
For preparation of 100 ml medium add 2 ml NC-27 Supplement into 98 ml of the appropriate basal media (AC-AP-0030).
Cell culture vessels must be coated with Poly-D-Lysine (0.05 mg/ml).
If using in combination with NC-2 Supplement add Fibronectin at a final concentration of 5 to 10 µg/ml directly to the medium.
For Cultivation of Fetal Neurons : Add NC-27 Supplement (50x) to basal media (add 0.5 mM L-glutamine) to a final concentration of 1x.
For initial plating of embryonic primary hippocampal neurons 25 µM (3.7 µg/ml) glutamate must be added for the first 4 days. After initial plating no glutamate is necessary.
Change media every 3 to 4 days.
For Serum-free Growth of Neuroblastomas : Add NC-27 Supplement to basal media (add 0.5 mM L-glutamine and 25 µg (3.7 µg /ml) glutamate) to a final concentration of 1x.