

**Neo Neuro A, Basal Medium for postnatal and adult neuronal cells, w/o L-Glutamine**

#Cat: NB-58-0095      Size: 500ml

**General Information**

Neo Neuro A is a basal medium developed for the maintenance and maturation of postnatal and adult brain neuronal cells without the need for an astrocyte nutrient layer. It can be used supplemented with a serum-free supplement like Neo NCS21 or also serum. It does not contain the amino acids glutamate and aspartate, making it suitable for the study of these neurotransmitters. Neo Neuro A supplemented with Neo NCS21 Supplement (or other commercially available variants) is also suitable for the growth of neuronal tumour cell lines.

**Product Specifications**

|  |  |
|--|--|
| <b>Appearance</b>                            | Clear red orange solution  |
| <b>CO<sub>2</sub> concentration, optimum</b> | 5.0 %  |
| <b>Storage and shelf life</b>                | Store at +2°C to +8°C protected from light.<br>Once opened, store at +4° C and use within 6-8 weeks. |
| <b>Shipping conditions</b>                   | Ambient  |

**Formulation**

| <b>Components</b>                | <b>Concentration mg/L</b> |
|----------------------------------|---------------------------|
| <b>Amino Acids:</b>              |                           |
| Glycine                          | 30.00                     |
| L-Alanine                        | 2.00                      |
| L-Arginine HCl                   | 84.0                      |
| L-Asparagine H <sub>2</sub> O    | 0.83                      |
| L-Cystine HCl H <sub>2</sub> O   | 45.66                     |
| L-Histidine HCl H <sub>2</sub> O | 42.00                     |
| L-Isoleucine                     | 105.00                    |
| L-Leucine                        | 105.00                    |
| L-Lysine HCl                     | 146.00                    |
| L-Methionine                     | 30.00                     |
| L-Phenylalanine                  | 66.00                     |
| L-Proline                        | 7.76                      |
| L-Serine                         | 42.00                     |
| L-Threonine                      | 95.00                     |
| L-Tryptophan                     | 16.00                     |
| L-Tyrosine 2Na 2H <sub>2</sub> O | 103.79                    |
| L-Valine                         | 94.00                     |

| <b>Vitamins:</b>                                     |         |
|--|---------|
| Choline Chloride                                     | 4.00    |
| D-Calcium Pantothenate                               | 4.00    |
| Folic Acid   | 4.00    |
| Nicotinamide   | 4.00    |
| Pyridoxal HCl  | 4.00    |
| Riboflavin   | 0.40    |
| Thiamine HCl   | 4.00    |
| Vitamin B <sub>12</sub>                              | 0.0068  |
| myo-Inositol   | 7.20    |
| <b>Inorganic Salts:</b>                              |         |
| CaCl <sub>2</sub> 2 H <sub>2</sub> O                 | 265.00  |
| Fe(NO <sub>3</sub> ) <sub>3</sub> 9 H <sub>2</sub> O | 0.10    |
| MgCl <sub>2</sub> 6 H <sub>2</sub> O                 | 165.06  |
| KCl  | 400.00  |
| NaHCO <sub>3</sub>                                   | 2200.00 |
| NaCl   | 4000.00 |
| NaH <sub>2</sub> PO <sub>4</sub> H <sub>2</sub> O    | 125.00  |
| ZnSO <sub>4</sub> 7 H <sub>2</sub> O                 | 0.194   |
| <b>Other Components:</b>                             |         |
| D-Glucose  | 4500.00 |
| HEPES  | 2600.00 |
| Phenol Red Sodium Salt                               | 8.10    |
| Sodium Pyruvate                                      | 25.00   |

## Instructions for Use

### Preparation of complete media

**Variant A:** Add 2 ml Neo NCS21 Supplement (Cat. No. NB-58-0043; or other commercially available variants) and 0.5 mM L-Glutamine to 100 ml Neo Neuro A under sterile conditions.

**Variant B:** Add 1 ml Neo N2 Supplement (100x; Cat. No. NB-58-0026) and 0.5 –2mM L-Glutamine to 100 ml Neo Neuro A under sterile conditions.

The complete supplemented Neo Neuro A Medium is stable for up to one week when stored at +2°C to +8°C in the dark.

**Note:** Include 25 µM (3.7 µg/ml) glutamate prior to initial plating of primary hippocampal neurons. Include 10 ng/ml bFGF for postnatal neurons.

### Culture of neuronal cells

1. Use Poly-D-Lysine coated sterile culture vessels.
2. Plate cells in pre-warmed (+37°C) complete Neo Neuro A medium (160 cells/mm<sup>2</sup> or suggested density supplied with the cells).
3. After 4 – 24 hours incubation at +37°C and 5 % CO<sub>2</sub>, replace half of the medium with the same volume of fresh complete medium.
4. Change half of the medium every 3 – 4 days.

## **Precautions and Disclaimer**

This product is for research use only.

## **Help Needed?**

If you have any further questions regarding this product, please do not hesitate to contact our cell culture experts by email ([info@neo-biotech.com](mailto:info@neo-biotech.com)) or phone (+33 9 77 40 09 09).