

## UAB "LT Biotech"

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Rugiu 21-24, LT-08419, Vilnius Reg. Nr. 127918,  
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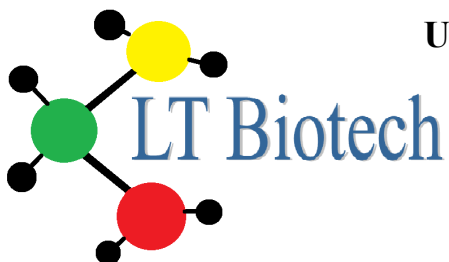
### MEM Alpha Modification, w/o L-Glutamine, with Nucleosides LTLM-B19

#### Product Specifications

|                                        |                                                   |
|----------------------------------------|---------------------------------------------------|
| CO <sub>2</sub> concentration, optimum | 5.0 %                                             |
| pH                                     | 7.0 – 7.5                                         |
| Osmolality                             | 260 – 340 mOsm/kg                                 |
| Colour and Appearance                  | Clear red orange solution                         |
| Endotoxin                              | <1 EU/ml (<0.1 ng/ml)                             |
| Cell Culture                           | Tested                                            |
| Sterility                              | Tested                                            |
| Storage                                | +2°C to +8°C protected from light, do not freeze! |

#### Formulation

| Components                           | Concentration mg/l | Molecular Weight g/mol | Concentration mM |
|--------------------------------------|--------------------|------------------------|------------------|
| <b>Amino Acids</b>                   |                    |                        |                  |
| L-Alanine                            | 25.00              | 89.09                  | 0.28             |
| L-Arginine · HCl                     | 126.00             | 210.66                 | 0.60             |
| L-Asparagine · H <sub>2</sub> O      | 50.00              | 150.13                 | 0.33             |
| L-Aspartic Acid                      | 30.00              | 133.10                 | 0.23             |
| L-Cysteine · HCl · H <sub>2</sub> O  | 100.00             | 175.63                 | 0.57             |
| L-Cystine · 2HCl                     | 31.30              | 313.22                 | 0.10             |
| L-Glutamic Acid                      | 75.00              | 147.13                 | 0.51             |
| Glycine                              | 50.00              | 75.07                  | 0.67             |
| L-Histidine · HCl · H <sub>2</sub> O | 42.00              | 209.63                 | 0.20             |
| L-Isoleucine                         | 52.00              | 131.17                 | 0.40             |
| L-Leucine                            | 52.00              | 131.17                 | 0.40             |
| L-Lysine · HCl                       | 72.50              | 182.65                 | 0.40             |
| L-Methionine                         | 15.00              | 149.21                 | 0.10             |
| L-Phenylalanine                      | 32.00              | 165.19                 | 0.19             |
| L-Proline                            | 40.00              | 115.13                 | 0.35             |
| L-Serine                             | 25.00              | 105.09                 | 0.24             |
| L-Threonine                          | 48.00              | 119.12                 | 0.40             |
| L-Tryptophan                         | 10.00              | 204.23                 | 0.05             |
| L-Tyrosine · 2 Na · H <sub>2</sub> O | 51.90              | 225.15                 | 0.23             |
| L-Valine                             | 46.00              | 117.15                 | 0.39             |
| <b>Vitamins</b>                      |                    |                        |                  |
| Ascorbic Acid · Na                   | 50.00              | 176.12                 | 0.28             |
| D-Biotin                             | 0.10               | 244.31                 | 0.0004           |
| Choline chloride                     | 1.00               | 139.62                 | 0.0072           |
| D-Calcium Pantothenate               | 1.00               | 476.53                 | 0.0021           |
| Folic Acid                           | 1.00               | 441.40                 | 0.0023           |



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|                                              |         |         |        |
|----------------------------------------------|---------|---------|--------|
| myo-Inositol                                 | 2.00    | 180.16  | 0.01   |
| Nicotinamide                                 | 1.00    | 122.12  | 0.0082 |
| Pyridoxal HCl                                | 1.00    | 203.62  | 0.0049 |
| Riboflavin                                   | 0.10    | 376.36  | 0.0003 |
| Thiamine HCl                                 | 1.00    | 337.27  | 0.0030 |
| Vitamin B12                                  | 1.36    | 1355.37 | 0.0010 |
| <b>Inorganic Salts</b>                       |         |         |        |
| CaCl <sub>2</sub> · 2 H <sub>2</sub> O       | 200.00  | 147.01  | 1.80   |
| MgSO <sub>4</sub> (anhydrous)                | 97.67   | 120.37  | 0.81   |
| KCl                                          | 400.00  | 74.55   | 5.37   |
| NaHCO <sub>3</sub>                           | 2200.00 | 84.01   | 26.19  |
| NaCl                                         | 6800.00 | 58.44   | 116.36 |
| Na <sub>2</sub> HPO <sub>4</sub> (anhydrous) | 122.00  | 119.98  | 1.02   |
| <b>Other Components</b>                      |         |         |        |
| Adenosine                                    | 10.00   |         |        |
| Cytidine                                     | 10.00   |         |        |
| Guanosine                                    | 10.00   |         |        |
| Uridine                                      | 10.00   |         |        |
| 2'-Deoxyadenosine                            | 10.00   |         |        |
| 2'-Deoxycytidine · HCl                       | 10.00   |         |        |
| 2'-Deoxyguanosine                            | 10.00   |         |        |
| Thymidine                                    | 10.00   |         |        |
| D-Glucose                                    | 1000.00 | 180.16  | 5.55   |
| Lipoic Acid                                  | 0.20    | 206.33  | 0.001  |
| Phenol Red · Na                              | 11.0    | 376.36  | 0.03   |
| Sodium Pyruvate                              | 110.00  | 110.04  | 1.00   |

### Precautions and Disclaimer

This product is for research use only. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.