



## Product Information

### Glasgow Minimum Essential Medium

Glasgow Minimum Essential Medium was originally developed by Ian MacPherson and Michael Stoker as a modification of Eagle's medium. This medium was used to study the genetic factors affecting cell competence. The polyoma virus was used to transform four fibroblast clones from a culture of baby hamster kidney cells. The medium was developed by modifying Eagle's BME by adding 10% tryptose phosphate (e.g., Sigma Prod. No. T8159 at 100 ml/L medium) and twice the normal concentration of amino acids and vitamins.

#### REFERENCE

MacPherson, I. and Stoker, M. (1961). Polyoma Transformation of Hamster Clones-An Investigation of Genetic Factors Affecting Cell Competence. *Virology*. 16, 147-151.

| COMPONENT  | G 6148<br>g/L | G 5154<br>[1X]<br>g/L |
|--|---------------|-----------------------|
| <b>INORGANIC SALTS</b>                               |               |                       |
| CaCl <sub>2</sub> •2H <sub>2</sub> O                 | 0.265         | 0.265                 |
| Fe(NO <sub>3</sub> ) <sub>3</sub> •9H <sub>2</sub> O | 0.0001        | 0.0001                |
| MgSO <sub>4</sub> (anhyd)                            | 0.09767       | 0.09767               |
| KCl  | 0.4           | 0.4                   |
| NaHCO <sub>3</sub>                                   | —             | 2.75                  |
| NaCl   | 6.4           | 6.4                   |
| NaH <sub>2</sub> PO <sub>4</sub> (anhyd)             | 0.1078        | 0.1078                |
| <b>AMINO ACIDS</b>                                   |               |                       |
| L-Arginine•HC  | 0.042         | 0.042                 |
| L-Cystine•2HCl                                       | 0.03129       | 0.03129               |
| L-Glutamine  | 0.292         | —                     |
| L-Histidine•HCl•H <sub>2</sub> O                     | 0.021         | 0.021                 |
| L-Isoleucine   | 0.0524        | 0.0524                |
| L-Leucine  | 0.0524        | 0.0524                |
| L-Lysine•HCl   | 0.0731        | 0.0731                |
| L-Methionine   | 0.015         | 0.015                 |
| L-Phenylalanine                                      | 0.033         | 0.033                 |
| L-Threonine  | 0.0476        | 0.0476                |
| L-Tryptophan   | 0.008         | 0.008                 |
| L-Tyrosine•2Na•H <sub>2</sub> O                      | 0.05219       | 0.05219               |
| L-Valine   | 0.0468        | 0.0468                |
| <b>VITAMINS</b>                                      |               |                       |
| Choline Chloride                                     | 0.002         | 0.002                 |
| Folic Acid   | 0.002         | 0.002                 |
| myo-Inositol   | 0.0036        | 0.0036                |
| Niacinamide  | 0.002         | 0.002                 |
| D-Pantothenic Acid•½Ca                               | 0.002         | 0.002                 |
| Pyridoxal•HCl  | 0.002         | 0.002                 |
| Riboflavin   | 0.0002        | 0.0002                |
| Thiamine•HCl   | 0.002         | 0.002                 |
| <b>OTHER</b>   |               |                       |
| D-Glucose  | 4.5           | 4.5                   |
| Phenol Red•Na  | 0.016         | 0.016                 |
| <b>ADD</b>   |               |                       |
| NaHCO <sub>3</sub>                                   | 2.75          | —                     |
| L-Glutamine  | —             | 0.292                 |
| Grams of powder required to prepare 1 L              | 12.5          | N/A                   |

