Glasgow's Minimum Essential Medium (GMEM)

With Sodium bicarbonate and Tryptose Phosphate Broth
Without L-Glutamine
1X Liquid Cell Culture Medium

Product Code: AL069

Product Description:
Glasgow's Minimum Essential Medium (GMEM) is a modification of Basal Medium Eagle (BME). Ian Macpherson and Michael Stoker added tryptose phosphate broth and twice the concentration of amino acids and vitamins to BME. The medium was originally used to culture BHK-21 clone 13 cells, used for investigating the genetic factors affecting cell competence.

AL069 is Glasgow's Minimum Essential Medium with sodium bicarbonate and tryptose phosphate broth. It does not contain L-glutamine. Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific for different cell lines.

Composition:

Ingredients                mg/L

INORGANIC SALTS
Calcium chloride dihydrate  265.000
Ferric nitrate nonahydrate   0.100
Magnesium sulphate anhydrous  97.720
Potassium chloride         400.000
Sodium bicarbonate         2750.000
Sodium chloride            6400.000
Sodium dihydrogen phosphate, anhydrous  109.000

AMINO ACIDS
L-Arginine hydrochloride   42.000
L-Cystine                  24.000
L-Histidine hydrochloride  21.000
L-Isoleucine               52.400
L-Leucine                  52.400
L-Lysine hydrochloride    73.100
L-Methionine               15.000
L-Phenylalanine            33.000
L-Threonine                47.600
L-Tryptophan               8.000
L-Tyrosine disodium salt   52.000
L-Valine                   46.800

VITAMINS
Choline chloride           2.000
D-Ca-Pantothenate          2.000
Folic acid                2.000
Nicotinamide              2.000
Pyridoxal hydrochloride   2.000
Riboflavin                0.200
Thiamine hydrochloride    2.000
i-Inositol                3.600

OTHERS
D-Glucose                4500.000
Phenol red sodium salt    15.000
Tryptose Phosphate Broth  2950.000

Directions:
1. Add 10ml of 200mM L-glutamine (TCL012) for 1 litre of medium.

Material required but not provided:
L-Glutamine solution 200mM (TCL012)

Quality Control:

Appearance
Red colored, clear solution.

pH
7.00 - 7.60

Osmolality in mOsm/Kg H2O
310.00 - 350.00

Sterility
No bacterial or fungal growth is observed after 14 days of incubation, as per USP specification.

Cultural Response
The growth promotion capacity of the medium is assessed qualitatively by analyzing the cells for the morphology and quantitatively by estimating the cell counts and comparing it with a control medium through minimum three subcultures.

Please refer disclaimer overleaf
Storage and Shelf Life:

Store at 2-8°C away from bright light.
Shelf life is 18 months.
Use before expiry date given on the product label.