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Technical Datasheet

Glasgow's Minimum Essential Medium (GMEM)

With L-Glutamine and Sodium bicarbonate
Without Tryptose Phosphate Broth

Product Code: AL166A

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.

AL166A is Glasgow's Minimum Essential Medium with L-Glutamine and Sodium bicarbonate. It does not contain tryptose phosphate broth. 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 nonhydrate	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 dihydrochloride	24.000
L-Glutamine	292.000
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

Quality Control:

Appearance
Red colored, clear solution.

pH
7.00 -7.60

Osmolality in mOsm/Kg H_2O
300.00 -340.00

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.

Endotoxin

NMT 1 EU/ml

Storage and Shelf Life:

Store at 2-8°C away from bright light.
Shelf life is 12 months.
Use before expiry date given on the product label.