

Glasgow' s MEM (GMEM)

Cat. No.: G4558

Product Information

Product Name	Cat. No.	Spec.
Glasgow' s MEM (GMEM)	G4558-500ML	500 mL

Product Description

Glasgow's MEM (GMEM), originally developed by Ian McPherson and Michael Stoker for use with renal cell lines such as BGK-21, is a modified form of Eagle's minimum essential medium. It is used to study the genetic factors that influence the ability of cells. This product, Glasgow's MEM, contains amino acids and vitamins at twice the concentration of the original base Eagle medium and contains no proteins, lipids or growth factors. Therefore, before use, add a supplement of 10% tryptone phosphate broth as needed. Glasgow MEM uses a sodium bicarbonate buffer system (2.75 g/L) and therefore requires a 5-10% CO₂ environment to maintain physiological pH.

This product is filtered and sterilized by 0.1 μm membrane, pH 6.7-7.1, containing 25 mM D-glucose, with 2.0 mM L-alanyl-L-glutamine added, no phenol red indicator, no sodium pyruvate, no HEPES buffer system, and no tryptone phosphate broth.

Storage and Shipping Conditions

Ship at room temperature; Store away from light at 2-8°C, valid for 12 months.

Note

1. This product has been filtered and sterilized. Attention should be paid to aseptic operation to avoid contamination.
2. For best results, do not freeze and thaw repeatedly.
3. For your safety and health, please wear safety glasses, gloves or protective clothing.

For Research Use Only!

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G4558 Glasgow' s MEM (GMEM)					
Components	Concentration		Components	Concentration	
	mg/L	mM		mg/L	mM
Amino acids			Inorganic salts		
L-Arginine hydrochloride	42	0.199	Calcium Chloride (CaCl ₂) (anhyd.)	200	1.8018
L-Cystine 2HCl	31	0.099	Ferric nitrate nonahydrate (Fe(NO ₃) ₃ • 9H ₂ O)	0.1	2.48E-04
L-Glutamine	292	2	Magnesium Sulfate (MgSO ₄) (anhyd.)	97.67	0.8139
L-Histidine hydrochloride-H ₂ O	21	0.1	Potassium Chloride (KCl)	400	5.333
L-Isoleucine	52	0.3969	Sodium Bicarbonate (NaHCO ₃)	2750	32.738
L-Leucine	52	0.3969	Sodium Chloride (NaCl)	6400	110.34
L-Lysine hydrochloride	73	0.3989	Sodium Phosphate monobasic (NaH ₂ PO ₄) (anhyd.)	108	0.8985
L-Methionine	15	0.1006	Other components		
L-Phenylalanine	33	0.2	D-Glucose (Dextrose)	4500	25
L-Threonine	47.6	0.3999	Phenol Red	15	0.039
L-Tryptophan	8	0.0392			
L-Tyrosine disodium salt dihydrate dihydrate	52	0.1992			
L-Valine	46.8	0.4			
Vitamins					
Choline chloride	2	0.0142			
D-Calcium pantothenate	2	0.0041			
Folic Acid	2	0.0045			
Niacinamide	2	0.0163			
Pyridoxine hydrochloride	2	0.0098			
Riboflavin	0.2	5.32E-04			

Thiamine	2	0.0059
hydrochloride		
Meso-Inositol	3.6	0.02
