

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., Catalog Number T8159 at 100 ml/L of medium) and twice the normal concentration of amino acids and vitamins.

	G6148	G5154	G2549
	[powder]	[1×]	[1×]
COMPONENT	g/L	g/L	g/L
Inorganic Salts			
CaCl ₂ • 2H ₂ O	0.265	0.265	0.265
Fe(NO ₃) ₃ • 9H ₂ O	0.0001	0.0001	0.0001
MgSO ₄ (anhydrous)	0.09767	0.09767	0.09767
KCl	0.4	0.4	0.4
NaHCO ₃	—	2.75	2.75
NaCl	6.4	6.4	6.4
NaH ₂ PO ₄ (anhydrous)	0.1078	0.1078	0.1078
Amino Acids			
L-Arginine • HCl	0.042	0.042	0.042
L-Cystine • 2HCl	0.03129	0.03129	0.03129
L-Glutamine	0.292	—	0.292
L-Histidine • HCl • H ₂ O	0.021	0.021	0.021
L-Isoleucine	0.0524	0.0524	0.0524
L-Leucine	0.0524	0.0524	0.0524
L-Lysine • HCl	0.0731	0.0731	0.0731
L-Methionine	0.015	0.015	0.015
L-Phenylalanine	0.033	0.033	0.033
L-Threonine	0.0476	0.0476	0.0476
L-Tryptophan	0.008	0.008	0.008
L-Tyrosine • 2Na • 2H ₂ O	0.05219	0.05219	0.05219
L-Valine	0.0468	0.0468	0.0468
Vitamins			
Choline Chloride	0.002	0.002	0.002
Folic Acid	0.002	0.002	0.002
myo-Inositol	0.0036	0.0036	0.0036
Niacinamide	0.002	0.002	0.002
D-Pantothenic Acid • ½Ca	0.002	0.002	0.002
Pyridoxal • HCl	0.002	0.002	0.002
Riboflavin	0.0002	0.0002	0.0002
Thiamine • HCl	0.002	0.002	0.002
Other			
D-Glucose	4.5	4.5	4.5
Phenol Red • Na	0.0213	0.0213	0.0213
ADD			
L-Glutamine	—	0.292	—
Sodium Bicarbonate	2.75	—	—

References

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