



Catalog Number: 1003122

Basal Medium Eagle (Modified) with Hank's Salts (HBME) with L-glutamine without sodium bicarbonate

Description: Basal Medium Eagle (BME), originally developed by Harry Eagle and the predecessor of MEM and DMEM, is one of the most commonly used of all cell culture media. According to the Tissue Culture Association (TCA), the name "Eagle's Basal Medium" refers only to the several formula developed by Eagle to support HeLa cells. This medium is the result of numerous studies from the late 1950's analyzing the nutrient requirements and other components essential for the growth of cells in culture. Traditionally, BME has been used in studies to measure the growth response of normal (WI-38) and transformed (HeLa) cells in monolayer culture. BME may be used for a broad variety of cell lines when properly supplemented.

Note: The amino acid concentrations in this formulation differ by decimal amounts from those recommended by the Tissue Culture Association. This formulation differs from the original in the concentration of Phenol Red. Also, the original reference contained 50 mg Penicillin and 50 mg Streptomycin per liter. The vitamins are added in the forms thought to be available to the author.

Formulation:

Components	mg/L	Mol. Wt.	Mol. (mM)
Amino Acids			
L-Arginine HCl	21.06	174.2	0.12
L-Cystine 2HCl	15.55	313.2	0.05
L-Glutamine	292.30	146.1	2.00
L-Histidine HCl H ₂ O	10.50	209.6	0.05
L-Isoleucine	26.23	131.2	0.20
L-Leucine	26.23	131.2	0.20
L-Lysine HCl	36.53	182.6	0.20
L-Methionine	7.46	149.2	0.05
L-Phenylalanine	16.51	165.2	0.10
L-Threonine	23.82	119.1	0.20

L-Tryptophan	4.08	204.2	0.02
L-Tyrosine 2Na 2H ₂ O	26.11	261.2	0.10
L-Valine	23.43	117.1	0.20
Vitamins			
Biotin	1.00	244.3	0.0041
Choline Chloride	1.00	139.6	0.0072
D-Calcium Pantothenate	1.00	238.3	0.0042
Folic Acid	1.00	441.4	0.0023
myo-Inositol	2.00	180.2	0.0111
Nicotinamide	1.00	122.13	0.0082
Pyridoxine HCl	1.00	205.6	0.0049
Riboflavin	0.10	376.4	0.0003
Thiamine HCl	1.00	337.3	0.0030
Inorganic Salts			
Calcium Chloride [CaCl ₂]	140.04	111	1.26
Magnesium Sulfate [MgSO ₄]	97.70	120.4	0.81
Potassium Chloride [KCl]	400.00	74.55	5.37
Potassium Phosphate Monobasic [KH ₂ PO ₄]	60.00	136.09	0.44
Sodium Chloride [NaCl]	8000.00	58.44	136.89
Sodium Phosphate Dibasic [Na ₂ HPO ₄]	47.50	141.96	0.33
Other			
Dextrose	1000.00	180.2	5.55
Phenol Red Sodium Salt	17.00	376.4	0.05
Add			
NaHCO ₃ Powder (g/L)	0.35		
NaHCO ₃ 7.5% Solution (mL/L)	4.67		

株式会社ケー・エー・シー

試薬事業部

〒661-0978 兵庫県尼崎市久々知西町2丁目1-20

(お問合せ先)

TEL : 06-6435-9747 FAX : 06-6435-9748

URL : <http://www.kacnet.co.jp/>

E-mail : cs-info@kacnet.co.jp