

Alpha MEM with Earle's salts

Catalogue #: CM002
Storage: 4-8 °C
Packing Size: 500mL

产品简介:

Minimum Essential Medium (MEM) 由Harry Eagle于上个世纪50年代开发的培养基工艺, 是最常用的细胞培养基之一, 早期应用于正常哺乳动物成纤维细胞和特定HeLa细胞亚系的培养。相对于Eagle's Basal Medium (BME), MEM中添加了细胞必需的营养成分, 随后的研究显示这些添加的营养成分对大多快速增长的细胞有促进作用。MEM含有较高水平的氨基酸, 接近于培养的哺乳动物细胞的组分。MEM广泛用于支持单层细胞的生长, 选择性添加非必需氨基酸和Hank's/Earle's盐更进一步扩大了MEM的使用范围。另外降低培养基中钙离子含量适用于悬浮细胞的培养。

MEM的alpha改进型(alpha-MEM)含有Earle's平衡盐、非必需氨基酸和丙酮酸钠, 并且相对于BME提高了维生素含量。该配方由Stanners等在1971年首先用于培养小鼠和仓鼠的杂交瘤细胞。

本产品含 L-glutamine, 不含 deoxyribonucleosides, Ribonucleosides。

产品类型: 无菌过滤即用型液体培养基

渗透压: 295±15 mOsm

酸碱度: 7.2±0.2

参考文献:

1. Eagle, H., et al myo-Inositol as an Essential Growth Factor for Normal and Malignant Human Cells in Tissue Culture. J.Biol. Chem., 214, 845-847 (1956).
2. Eagle, H., Media for Animal Cell Culture. Tissue Culture Association Manual. 3, 517-520 (1976).
3. Eagle, H., Amino Acid Metabolism in Mammalian Cell Cultures. Science. 130, 432-437 (1959).
4. Eagle, H., Nutrition Needs of Mammalian Cells in Culture. Science. 122, 501 (1955).
5. Stanners, C.P., et al., Two Types of Ribosome in Mouse-Hampster Hybrid Cells. Nature New Biology. 230, 52-54 (1971).
6. Stanners, C.P., and Goldberg, V.J., On the Mechanism of Neutropism of Vesicular Stomatitis Virus in Newborn Hampsters. Studies With Temperature-Sensitive Mutants. J. Gen. Virol. 29, 281-296 (1975).

<i>Inorganic Salts</i>	<i>mg/L</i>	<i>Vitamins</i>	<i>mg/L</i>
CaCl ₂ (anhydrous)	200	Ascorbic acid	50
KCl	400	Biotin	0.1
MgSO ₄ (anhydrous)	97.7	D-Calcium pantothenate	1
NaCl	6800	Choline chloride	1
NaH ₂ PO ₄ •H ₂ O	140	Folic acid	1
NaHCO ₃	2200	i-Inositol	2
<i>Amino Acids</i>		Nicotinamide	1
L-Alanine	25	Pyridoxine•HCl	1
L-Arginine•HCl	126.4	Riboflavin	0.1
L-Asparagine•H ₂ O	50	Thiamine•HCl	1
L-Aspartic acid	30	Vitamin B12	1.36
L-Cysteine•HCl•H ₂ O	100	<i>Other</i>	
L-Cystine•2HCl	31.2	D-Glucose	1000
L-Glutamic acid	75	Lipoic acid	0.2
L-Glutamine	292	Phenol red, Na	10
Glycine	50	Sodium pyruvate	110
L-Histidine•HCl•H ₂ O	41.9		
L-Isoleucine	52.5		
L-Leucine	52.5		
L-Lysine•HCl	72.5		
L-Methionine	15		
L-Phenylalanine	32.5		
L-Proline	40		
L-Serine	25		
L-Threonine	47.6		
L-Tryptophan	10		
L-Tyrosine•2Na•2H ₂ O	51.9		
L-Valine	46.8		

For resaech use only