

Alpha-MEM

货号: M3401、M3402、M3403

规格: 500ml

有效期: 2-8°C避光保存, 有效期 12 个月。

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殖的细胞有促进作用。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。各种alpha-MEM的区别主要在于是否含有L-谷氨酰胺(L-glutamine), 核糖核苷和脱氧核糖核苷等。

渗透压: 295±15 mOsm

酸碱度: 7.2±0.2

Cat. NO.	M3401	M3402	M3403
Components	Concentration (mg/L)	Concentration (mg/L)	Concentration (mg/L)
<i>Inorganic Salts</i>			
CaCl ₂ (anhydrous)	200.0	200.0	200.0
KCl	400.0	400.0	400.0
MgSO ₄ (anhydrous)	97.7	97.7	97.7
NaCl	6800.0	6800.0	6800.0
NaH ₂ PO ₄ · H ₂ O	140.0	140.0	140.0
NaHCO ₃	2200	2200	2200
<i>Amino Acids</i>			
L-Alanine	25.0	25.0	25.0
L-Arginine · HCl	126.4	126.4	126.4
L-Asparagine · H ₂ O	50.0	50.0	50.0
L-Aspartic acid	30.0	30.0	30.0
L-Cysteine · HCl · H ₂ O	100.0	100.0	100.0
L-Cystine · 2HCl	31.2	31.2	31.2
L-Glutamic acid	75.0	75.0	75.0
L-Glutamine	292.0	292.0	0
Glycine	50.0	50.0	50.0

L-Histidine • HCl • H ₂ O	41.9	41.9	41.9
L-Isoleucine	52.5	52.5	52.5
L-Leucine	52.5	52.5	52.5
L-Lysine • HCl	72.5	72.5	72.5
L-Methionine	15.0	15.0	15.0
L-Phenylalanine	32.5	32.5	32.5
L-Proline	40.0	40.0	40.0
L-Serine	25.0	25.0	25.0
L-Threonine	47.6	47.6	47.6
L-Tryptophan	10.0	10.0	10.0
L-Tyrosine • 2Na • 2H ₂ O	51.9	51.9	51.9
L-Valine	46.8	46.8	46.8
<i>Vitamins</i>			
Ascorbic acid	50.0	50.0	50.0
Biotin	0.1	0.1	0.1
D-Calcium pantothenate	1.0	1.0	1.0
Choline chloride	1.0	1.0	1.0
Folic acid	1.0	1.0	1.0
<i>i</i> -Inositol	2.0	2.0	2.0
Nicotinamide	1.0	1.0	1.0
Pyridoxine • HCl	1.0	1.0	1.0
Riboflavin	0.1	0.1	0.1
Thiamine • HCl	1.0	1.0	1.0
Vitamin B12	1.36	1.36	1.36
<i>Other</i>			
D-Glucose	1000	1000	1000
Lipoic acid	0.2	0.2	0.2
Phenol red,Na	10	10	10
Sodium pyruvate	110	110	110
<i>Nucleosides</i>			
Thymidine	0	10	0
Adenosine	0	10	0
Cytidine	0	10	0
Guanosine	0	10	0
Uridine(anhydrous)	0	10	0
2'-Deoxyadenosine	0	10	0
2'-Deoxycytidine • HC	0	11	0
2'-Deoxyguanosine	0	10	0

参考文献:

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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).