

**Product Name**

Name: Minimum Essential Medium-Alpha, with L-Alanyl-L-Glutamine, without Ascorbic acid

Cat. No.: C3065-0500

Size: 500 mL

**Product Description**

MEM-alpha contains Earle's balanced salts, non-essential amino acids, sodium pyruvate, and certain vitamins. This formulation was first proposed and used by Stanners for growing mouse hybridomas and hamster cells.

The medium does not contain any deoxyribonucleosides and ribonucleosides and thus can be used as selection medium for DHFR-negative cells. Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific to different cell lines.

**Advantages of using L-Alanyl-L-Glutamine:** It is much more stable than L-glutamine during storage, releasing less ammonia in culture, and thus improves cell viability and growth.

**Composition**

Ingredients	mg/L	Ingredients	mg/L
<b>INORGANIC SALTS</b>			
Calcium chloride dihydrate	265.000	Sodium chloride	6800.000
Magnesium sulphate anhydrous	97.720	Sodium dihydrogen phosphate anhydrous	122.000
Potassium chloride	400.000		
<b>AMINO ACIDS</b>			
Glycine	50.000	L-Leucine	52.000
L-Alanine	25.000	L-Lysine hydrochloride	72.500
L-Arginine hydrochloride	126.000	L-Methionine	15.000
L-Asparagine monohydrate	50.000	L-Phenylalanine	32.000
L-Aspartic acid	30.000	L-Proline	40.000
L-Cysteine hydrochloride	100.000	L-Serine	25.000
L-Cystine dihydrochloride	31.300	L-Threonine	48.000
L-Glutamic acid	75.000	L-Tryptophan	10.000
L-Alanyl-L-Glutamine	434.030	L-Tyrosine disodium Salt	51.900
L-Histidine hydrochloride monohydrate	42.000	L-Valine	46.000
L-Isoleucine	52.000		
<b>Vitamins</b>			
Choline chloride	1.000	Pyridoxal hydrochloride	1.000
D-Biotin	0.100	Riboflavin	0.100

D-Ca-Pantothenate	1.000	Thiamine hydrochloride	1.000
Folic acid	1.000	Vitamin B12	1.360
L-Ascorbic acid	50.000	i-Inositol	2.000
Nicotinamide	1.000		
<b>OTHERS</b>			
2' Deoxyadenosine	10.000	Alpha lipoic acid	0.200
2' Deoxycytidine	11.000	Phenol red sodium salt	11.000
2' Deoxyguanosine	10.000	Sodium pyruvate	110.000
Adenosine	10.000	Sodium bicarbonate	2200.000
Cytidine	10.000	Thymidine	10.000
Guanosine	10.000	Uridine	10.000
D-glucose	1000.000		

### Storage and Stability

The product should be kept at **2 - 8°C**.

The product is **light-sensitive** and therefore should not be left in the light.

Shelf life: 12 months from the date of manufacture.

### Procedure

1. Take a bottle from the refrigerator at 2 - 8°C and read the label.
2. Wipe the outside of the bottle with a disinfectant solution such as 70% ethanol.
3. Pipette out the appropriate volume using an aseptic/sterile technique under a laminar-flow culture hood.
4. Add antibiotics or other nutrients if desired.

### Quality Control

Minimum Essential Medium-Alpha, with with L-Alanyl-L-Glutamine, without Ascorbic acid is tested for sterility, pH, osmolality, and endotoxin concentration. In addition, each batch is tested for cell growth performance.

### Precaution and Disclaimer

For research use only, not for clinical diagnosis, and treatment.