

**Product Name**

Name: Medium 199, with Earle's salts and L-Glutamine

Cat. No.: C3030-0500

Size: 500 mL

**Product Description**

Medium 199 was the first nutritionally defined medium developed by Morgan, Morton, and Parker in 1950. This complex medium was formulated specifically for nutritional studies on primary chick embryo fibroblasts in the absence of any additives. It was observed that explanted tissue could survive in Medium 199 without serum but long-term cultivation of the cells required supplementation of the medium with serum.

Medium 199 is formulated with either Hank's salts or Earle's salts. The medium when supplemented with serum can be used for the growth of a wide variety of cells. Medium 199 is presently used for the maintenance of non-transformed cells, vaccine and virus production, and primary explants of epithelial cells.

Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific to different cell lines.

**Composition**

Ingredients	mg/L	Ingredients	mg/L
<b>INORGANIC SALTS</b>			
Calcium nitrate tetrahydrate	265.000	Sodium acetate anhydrous	50.000
Magnesium sulphate anhydrous	97.720	Sodium chloride	6800.000
Potassium chloride	400.000	Sodium phosphate dibasic anhydrous	122.000
<b>AMINO ACIDS</b>			
Ascorbic acid	0.050	L-Isoleucine	20.000
Glycine	50.000	L-Leucine	60.000
L-Alanine	25.000	L-Lysine hydrochloride	70.000
L-Arginine hydrochloride	70.000	L-Methionine	15.000
L-Aspartic acid	30.000	L-Phenylalanine	25.000
L-Cysteine hydrochloride monohydrate	0.100	L-Proline	40.000
L-Cystine dihydrochloride	26.000	L-Serine	25.000
L-Glutamic acid	67.000	L-Threonine	30.000
L-Glutamine	100.000	L-Tryptophan	10.000
L-Histidine hydrochloride monohydrate	22.000	L-Tyrosine disodium salt	57.660
L-Hydroxyproline	10.000	L-Valine	25.000



**Vitamins**

Calciferol	0.100	Nicotinic acid	0.025
Choline chloride	0.500	Pyridoxal hydrochloride	0.025
D-Biotin	0.010	Pyridoxine hydrochloride	0.025
D-Ca-Pantothenate	0.010	Retinol Acetate	0.140
DL-Tocopherol phosphate disodium salt	0.010	Riboflavin	0.010
Folic acid	0.010	Thiamine hydrochloride	0.010
Menadione	0.010	i-Inositol	0.050
Nicotinamide	0.025	p-Amino benzoic acid (PABA)	0.050

**OTHERS**

Adenine sulphate	10.000	Hypoxanthine	0.354
Adenosine monophosphate	0.200	Phenol red sodium salt	15.000
Adenosine triphosphate	1.000	Polysorbate 80	4.900
Cholesterol	0.200	Ribose	0.500
Deoxyribose	0.500	Thymine	0.300
Ferric nitrate nonahydrate	0.720	Uracil	0.300
Glucose	1000.000	Xanthine	0.344
Glutathione reduced	0.050	Sodium bicarbonate	2200.000
Guanine hydrochloride	0.300		

**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 date of manufacture.

**Procedure**

1. Take a bottle from the defined storage conditions 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**

Medium 199, with Earle's salts and L-Glutamine is tested for sterility, pH, osmolality, and endotoxin concentration. In addition, each batch is tested for cell growth performance.

**Manufacturer**

Shanghai Dr. Cell Co., Ltd.



**Issue Date**

June 2023

**Precaution and Disclaimer**

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

