

Product Name

Name: Medium 199, with HBSS, HEPES, L-Glutamine and Sodium Bicarbonate

Cat. No.: C3032-0500

Size: 500 mL

Product Description

M-199 medium was developed by Morgan, Morton, Parker, and colleagues in 1950 as the first nutrient defined medium. M-199 medium was originally designed for the culture of primary chick embryo fibroblasts, and it is now used in vaccine production, virology study, and many other cell culture applications. There are two types of M-199 medium: Earle's salt solution and Hank's salt solution.

M-199 medium supplemented with serum can be used to culture a variety of species of cells. Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific to different cell lines.

Sodium phosphate, dibasic
(Na₂HPO₄·7H₂O) 90.000

Amino acids

Glycine 50.000

L-Alanine 25.000

L-Arginine hydrochloride 70.000

L-Aspartic acid 30.000

L-Cysteine hydrochloride monohydrate 0.100

L-Cystine dihydrochloride 26.000

L-Glutamine 100.000

L-Glutamic acid 75.000

L-Histidine hydrochloride monohydrate 21.880

L-Hydroxyproline 10.000

L-Isoleucine 40.000

L-Leucine 60.000

L-Lysine hydrochloride 70.000

L-Methionine 15.000

L-Phenylalanine 25.000

L-Proline 40.000

Composition:

Ingredients mg/L

Inorganic salts

Calcium chloride (CaCl₂)(anhyd.) 140.000

Ferric nitrate (Fe(NO₃)₃·9H₂O) 0.700

Magnesium sulphate anhydrous 97.670

Potassium chloride (KCl) 400.000

Potassium phosphate (KH₂PO₄) 60.000

Sodium chloride (NaCl) 7500.000

Sodium Bicarbonate (NaHCO₃) 350.000



L-Serine	25.000	i-Inositol	0.050
L-Threonine	30.000	p-Amino benzoic acid (PABA)	0.050
L-Tryptophan	10.000	Others	
L-Tyrosine disodium salt	40.000	Adenine sulphate	10.000
L-Valine	25.000	Adenosine monophosphate	0.200
Vitamins		Adenosine 5'-triphosphate, disodium salt	1.000
Calciferol (Vitamin D2)	0.100	Cholesterol	0.200
Ascorbic acid	0.050	Deoxyribose	0.500
Choline chloride	0.500	Glucose	1000.000
D-Biotin	0.010	Glutathione reduced	0.050
D-Ca-Pantothenate	0.010	Guanine hydrochloride	0.300
DL-Tocopherol phosphate disodium salt	0.010	Hypoxanthine	0.400
Folic acid	0.010	Tween 80	20.000
Menadione (Vitamin K3)	0.010	Ribose	0.500
Nicotinamide	0.025	Thymine	0.300
Nicotinic acid	0.025	Uracil	0.300
Pyridoxal hydrochloride	0.025	Xanthine	0.340
Pyridoxine hydrochloride	0.025	Phenol Red	20.000
Retinol Acetate (Vitamin A)	0.100	Sodium acetate anhydrous	50.000
Riboflavin	0.010	HEPES	5960.000
Thiamine hydrochloride	0.010		

Procedure

- Take a bottle from the refrigerator at 2 - 8°C and read the label.



- Wipe the outside of the bottle with a disinfectant solution such as 70% ethanol.
- Pipette out appropriate volume using an aseptic/sterile technique under a laminar-flow culture hood.
- Add antibiotics or other nutrients if desired.

Storage and Stability

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

The product is light-sensitive and therefore should be protected from light.

Shelf life: 12 months from the date of manufacture..

Precautions

- Do not use it if the packaging is broken or dripping.
- Avoid contamination during operation.
- Rinse immediately with tap water, if the solution contacts the skin and mucous membrane.
- Use before expiry date .

Quality Control

Medium 199, with HBSS, HEPES, L-Glutamine and Sodium Bicarbonate 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

Feb. 2026

Precaution and Disclaimer

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

