

Product Name

Name: McCoy's 5A Medium (Modified), with L-Alanyl-L-Glutamine

Cat. No.: C3021-0500

Size: 500 mL

Product Description

McCoy's 5A medium was developed at Roswell Park Memorial Institute in Buffalo, New York. The first medium was developed in 1955 as the result of studies on the nutritional requirements of the Walker 256 carcinoma. The original formulation was similar to the amino acid concentrations in Eagle's medium and the concentration of the water-soluble vitamins of Medium199. Modifications to the original formulation resulted in the final version being published in 1960. The final formulation also incorporates modifications done by Iwakata and Grace and contains more folic acid, vitamin B12, and peptone. This medium is also known to support the growth of primary cultures derived from a variety of tissues.

The culture medium has been supplemented with L-Alanyl-L-Glutamine in place of L-Glutamine. Compared with L-Glutamine, L-Alanyl-L-Glutamine is much more stable, releases less ammonia in culture, and improves cell viability and growth.

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

Potassium chloride 400.000

Sodium chloride 6460.000

Sodium phosphate monobasic anhydrous 504.350

Amino acids

Glycine 7.510

L-Alanine 13.360

L-Arginine hydrochloride 42.140

L-Asparagine, anhydrous 45.030

L-Aspartic acid 19.970

L-Cysteine hydrochloride 31.500

L-Glutamic acid 22.070

L-Alanyl-L-Glutamine 325.731

L-Histidine hydrochloride 20.960

L-Hydroxyproline 19.670

L-Isoleucine 39.360

L-Leucine 39.360

Magnesium sulfate 97.670

L-Lysine hydrochloride 36.540

Sodium chloride 8000.000

L-Methionine 14.920

Composition:

Ingredients mg/L

Inorganic salts

Calcium chloride dihydrate 132.430

Magnesium sulphate anhydrous 97.720



L-Phenylalanine	16.520	p-Amino benzoic acid (PABA)	1.000
L-Proline	17.270	Others	
L-Serine	26.280	D-Glucose	3000.000
L-Threonine	17.870	Glutathione reduced	0.500
L-Tryptophan	3.060	Peptic digest of animal tissue	600.000
L-Tyrosine Disodium Salt	26.100	Phenol red (sodium salt)	11.000
L-Valine	17.570	Sodium bicarbonate	2200.000

Vitamins

Ascorbic acid	0.5625
Biotin	0.200
Choline chloride	5.000
D-Ca-Pantothenate	0.200
Folic acid	10.000
Niacin	0.500
Niacinamide	0.500
Pyridoxal hydrochloride	0.500
Pyridoxine hydrochloride	0.500
Riboflavin	0.200
Thiamine hydrochloride	0.200
Vitamin B12	2.000
i-Inositol	36.000

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

McCoy's 5A Medium (modified) with L-Glutamine is tested for sterility, pH, osmolality, and endotoxin concentration. In addition, each batch is tested for cell growth performance.

Issue Date

Mar. 2026

Precaution and Disclaimer

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

Manufacturer

Shanghai XP Biomed Ltd.

