

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.

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|--------------------------------------|----------|
| Potassium chloride | 400.000 |
| Sodium chloride | 6460.000 |
| Sodium phosphate monobasic anhydrous | 504.350 |

Amino acids

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|---------------------------|----------|
| 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



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|--------------------------|--------|--------------------------------|----------|
| 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

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|--------------------------|--------|
| 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.

Manufacturer

Shanghai XP Biomed Ltd.

Issue Date

Mar. 2026

Precaution and Disclaimer

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

