



Technical Datasheet

McCoy's 5A Medium

With 1.5mM L-Glutamine and 2.2gms per litre Sodium bicarbonate

Product Code: AL057S

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 based on the amino acids in concentrations similar to those in Eagle's medium as well as the water soluble vitamins of Medium 199. 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 increased amounts of folic acid, vitamin B12, and peptone. This medium is also known to support growth of primary cultures derived from a variety of tissues.

AL057S is McCoy's 5A medium with 1.5mM L-Glutamine and 1.5gms per litre sodium bicarbonate. Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific for different cell lines.

Composition:

Ingredients	mg/L
INORGANIC SALTS	122 120
Calcium chloride dihydrate	132.430
Magnesium sulphate anhydrous	97.720
Potassium chloride	400.000
Sodium bicarbonate	1500.000
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 monohydrate	45.030
L-Aspartic acid	19.970
L-Cysteine	31.500
L-Glutamic acid	22.070
L-Glutamine	219.200

L-Histidine hydrochloride	20.960
L-Hydroxyproline	19.670
L-Isoleucine	39.360
L-Leucine	39.360
L-Lysine hydrochloride	36.540
L-Methionine	14.920
L-Phenylalanine	16.520
L-Proline	17.270
L-Serine	26.280
L-Threonine	17.870
L-Tryptophan	3.060
L-Tyrosine disodium salt dihydrate	26.100
L-Valine	17.570
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
p-Amino benzoic acid (PABA)	1.000
OTHERS	
D-Glucose	3000.000
Glutathione reduced	0.500
Peptic digest of animal tissue	600.000
Phenol red sodium salt	11.000

Quality Control:

Appearance

Orangish red colored, clear solution.

pН

7.00-7.60

Osmolality in mOsm/Kg H₂O

280.00 -320.00

Sterility

No bacterial or fungal growth is observed after 14 days of incubation, as per USP specification.

Cultural Response

The growth promotion capacity of the medium is assessed qualitatively by analyzing the cells for the morphology and quantitatively by estimating the cell counts and comparing it with a control medium.

Endotoxin Content

NMT 1EU/ml

Storage and Shelf Life:

Store at 2-8°C away from bright light. Shelf life is 12 months. Use before expiry date given on the product label.

Disclaimer: Revision: 03/2022

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