

### Technical Information

#### McCoy's 5A Medium

With Sodium bicarbonate Without L-Glutamine 1X Liquid Cell Culture Medium

#### Product Code: AL1057

**Application:-** 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.

AL1057 is McCoy's 5A medium with sodium bicarbonate. It does not contain L-glutamine. Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific for different cell lines.

#### Composition\*\*

Ingredients	mg / Litre
<b>INORGANIC SALTS</b>	
Calcium chloride dihydrate	132.430
Magnesium sulphate anhydrous	97.720
Potassium chloride	400.000
Sodium bicarbonate	2200.000
Sodium chloride	6460.000
Sodium phosphate monobasic anhydrous	504.350
<b>AMINO ACIDS</b>	
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-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	26.100
L-Valine	17.570
<b>VITAMINS</b>	
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
<b>OTHERS</b>	
D-Glucose	3000.000
Glutathione reduced	0.500
Peptic digest of animal tissue	600.000
Phenol red sodium salt	11.000

### Methodology

1. Add 7.5 ml of 200mM L-glutamine (TCL1012) for 1 litre of medium.

### Material required but not provided

L-Glutamine solution 200mM (TCL1012)

### Quality control

#### Appearance

Orangish red colored, clear solution.

#### pH

7.00 -7.60

#### Osmolality in mOsm/Kg H<sub>2</sub>O

300.00 -340.00

#### 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 through minimum three subcultures.

#### Endotoxin Content

NMT 5EU/ml

### Storage and Shelf Life

store at 2-8°C away from bright light. Shelf life is 18 months. Use before expiry date given on the product label.

### Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
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