

Product Information

McCoy's 5A Modified Media

In 1959, McCoy and his coworkers reported the amino acid requirements for *in vitro* cultivation of Novikoff Hepatoma Cells. These studies were performed using Basal Medium 5A, and subsequently modified to create a new medium known as McCoy's 5A Medium.

Hsu and Kellogg employed this medium to support growth of primary cultures derived from normal bone marrow, skin, gingiva, testes, mouse kidney, omentum, adrenal glands, lung, spleen, rat embryos, and other tissues.

	M4892	M8403	M9309
	[powder]	[1x]	[1x]
COMPONENT	g/L	g/L	g/L
Inorganic Salts			
CaCl ₂	0.1324324	0.1324324	0.1324324
MgSO ₄	0.0976876	0.0976876	0.0976876
KCl	0.4	0.4	0.4
NaHCO ₃	—	2.2	2.2
NaCl	6.46	6.46	6.46
NaH ₂ PO ₄	0.504	0.504	0.504
Amino Acids			
L-Alanine	0.01336	0.01336	0.01336
L-Arginine • HCl	0.04214	0.04214	0.04214
L-Asparagine • H ₂ O	0.04503	0.04503	0.04503
L-Aspartic Acid	0.01997	0.01997	0.01997
L-Cysteine	0.02424	0.02424	0.02424
L-Glutamic Acid	0.02207	0.02207	0.02207
L-Glutamine	0.21915	—	0.21915
Glycine	0.00751	0.00751	0.00751
L-Histidine • HCl • H ₂ O	0.02096	0.02096	0.02096
Hydroxy-L-proline	0.01967	0.01967	0.01967
L-Isoleucine	0.03936	0.03936	0.03936
L-Leucine	0.03936	0.03936	0.03936
L-Lysine • HCl	0.03654	0.03654	0.03654
L-Methionine	0.01492	0.01492	0.01492
L-Phenylalanine	0.01652	0.01652	0.01652
L-Proline	0.01727	0.01727	0.01727
L-Serine	0.02628	0.02628	0.02628
L-Threonine	0.01787	0.01787	0.01787
L-Tryptophan	0.00306	0.00306	0.00306
L-Tyrosine • 2Na • 2H ₂ O	0.0261	0.0261	0.0261
L-Valine	0.01757	0.01757	0.01757
Vitamins			
Ascorbic Acid	0.0005625	0.0005625	0.0005625
p-Amino Benzoic Acid	0.001	0.001	0.001
D-Biotin	0.0002	0.0002	0.0002
Choline Chloride	0.005	0.005	0.005
Folic Acid	0.010	0.010	0.010
myo-Inositol	0.036	0.036	0.036
Niacinamide	0.0005	0.0005	0.0005
Nicotinic Acid	0.0005	0.0005	0.0005
D-Pantothenic Acid • ½Ca	0.0002	0.0002	0.0002
Pyridoxal • HCl	0.0005	0.0005	0.0005
Pyridoxine • HCl	0.0005	0.0005	0.0005
Riboflavin	0.0002	0.0002	0.0002
Thiamine • HCl	0.0002	0.0002	0.0002
Vitamin B-12	0.002	0.002	0.002
Other			
Peptone	0.6	0.6	0.6
D-Glucose	3.0	3.0	3.0
Glutathione (reduced)	0.0005	0.0005	0.0005
Phenol Red • Na	0.011	0.011	0.011

ADD			
NaHCO ₃	2.2	—	—
L-Glutamine	—	0.21915	—

References

1. McCoy, T.A., Maxwell, M. and Kruse, P.F., (1959). Amino Acid Requirement of the Novioff Hepatoma In Vitro. Proc. Soc. Exp. Biol. Med. 100, 115-118.
2. Patterson, M.K. and Dell'orco, R.T., (1978). Preparation of McCoy's Medium 5A. Tissue Culture Association Manual. 4, 737-740.
3. Hsu, T.C. and Kellogg, D.S., (1960). Primary Cultivation and Continuous Propagation In Vitro of Tissues from Small Biopsy Specimens. J.N.C.I. 25, 221-231.
4. Iwakata, S. and Grace, J.T., (1964). Cultivation in Vitro of Myeoblasts from Human Leukemia. New York State Journal of Med. 64, 2279-2282.
5. Morton, H.J., (1970). A Survey of Commercially Available Tissue Culture Media. In Vitro. 6, 89.

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