

McCoy's 5 A modified liquid medium

McCoy's 5 A medium was originally developed for the growth of Novikoff hepatoma cells. As modified by Iwakata and Grace, the increased levels of glucose, vitamins, and peptone make McCoy's 5 A a good general purpose medium for both pri-

mary and established cell lines. Cells from biopsies (liver, intestine, skin, testes, bone marrow, spleen, lung, and gingiva) have successfully been cultivated in this medium. To be used with 5 % CO₂ for optimal buffering.

Product	Cat. No.	Unit
McCoy's 5 A modified liquid medium with 2.2 g/l NaHCO ₃ , without L-glutamine Storage temperature: +2 – +8 °C	F 1015	500 ml

Formulation

Different from the original formulation, only 0.05 mg/l riboflavin is used to avoid negative photo oxidative effects.

Tab. 23: Composition of the McCoy's 5 A mod. liquid medium

Substance	Concentration (mg/l)	Substance	Concentration (mg/l)
NaCl	6460	L-proline	17.3
KCl	400	L-serine	26.3
NaH ₂ PO ₄ ·H ₂ O	580	L-threonine	17.9
CaCl ₂	100	L-tryptophane	3.1
MgSO ₄ ·7H ₂ O	200	L-tyrosine	18.1
D-glucose	3000	L-valine	17.6
Phenol red	10	Glutathione	0.5
NaHCO ₃	2200	Bacto-peptone	600
L-alanine	13.9	Ascorbic acid	0.5
L-arginine-HCl	42.1	Biotin	0.2
L-asparagine	45	D-Ca-pantothenate	0.2
L-aspartic acid	19.97	Cholin chloride	5
L-cysteine	31.5	Folic acid	10
L-glutamine	219.2	Myo-inositol	36
L-glutamic acid	22.1	Nicotinic acid	0.5
Glycine	7.5	Nicotinamide	0.5
L-histidine-HCl·H ₂ O	20.96	p-amino benzoic acid	1
L-hydroxyproline	19.7	Pyridoxal-HCl	0.5
L-isoleucine	39.36	Pyridoxin-HCl	0.5
L-leucine	39.36	Riboflavin	0.2
L-lysine-HCl	36.5	Thiamine-HCl	0.2
L-methionine	14.9	Vitamin B ₁₂	2
L-phenylalanine	16.5		

Reference:

Iwakata. S. and J.T. Grace; *N.Y. State J. Med.* **64**, 2279 [1964]