L-15 Leibovitz liquid medium

Leibovitz L-15 is designed for use in CO_2 free atmosphere in unsealed containers; hence, no sodium bicarbonate supplement is required. The medium is buffered by the higher amino acid content, in particular L-arginine is useful in growing established cell lines (e.g. Hep-2) in non CO_2-equilibrated environments.

L-15 Leibovitz medium supports besides Hep-2 the growth of a large number of established cell lines and the growth of primary human tissue explants and the nerve cells. On the supplementation with 10 % tryptose-phosphate-broth it is particularly apt for the cultivation of insect cell lines.

This medium is also available as a standard in powder with a minimum order of 500 litres; pack sizes are 10 or 50 litres.

Product	Cat. No.	Unit
L-15 Leibovitz liquid medium without $NaHCO_3$, without L-glutamine Storage temperature: +2 – +8 °C	F 1315	500 ml

Formulation

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

Tab. 22: Composition of the L-15 Leibovitz liquid medium

Substance	Concentration (mg/l)
NaCl	8000
KCl	400
$CaCl_2$	140
$MgSO_4 \cdot 7H_2O$	200
$MgCl_2 \cdot 6H_2O$	200
$Na_2HPO_4 \cdot 7H_2O$	359
KH_2PO_4	60
D(+)galactose	900
Na-pyruvate	550
Phenol red	10
L-alanine	225
L-arginine	500
L-asparagine	250
L-cysteine	120
L-glutamine	300
Glycine	200
L-histidine	250
L-isoleucine	125

Substance	Concentration (mg/l)
L-leucine	125
L-lysine	75
L-methionine	75
L-phenylalanine	125
L-serine	200
L-threonine	300
L-tryptophane	20
L-tyrosine	300
L-valine	100
D-Ca-pantothenate	1
Cholin chloride	1
Folic acid	1
Myo-inositol	2
Nicotinamide	1
Pyridoxin·HCl	1
Riboflavin-5-phosphate-Na	0.1
Thiamine monophosphate	1

References:
1. A. Leibovitz; *Am.J. Hyg.* **78**, 173 [1963]
2. H.J. Morton; *In Vitro.* **6**, 89 [1970]