

OTHER MICROBIOLOGICAL MEDIA

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http://biology.clc.uc.edu/fankhauser/Labs/Microbiology/Media_Prep/Media_Phage.htm

The following media have been used in past years, and may be used under some circumstances. These media may be prepared and used for a variety of experiments including propagation of fastidious microorganisms and the propagation, titering and genetic crossing of bacterial viruses (bacteriophage). See the protocol *Microbiological Media Preparation* for principles and practices of media prep.

TRYPTONE GLUCOSE EXTRACT AGAR

14.4 g/600 mL

(a Standard Plate Count Agar, for enumeration of bacteria in milk, meat, etc.)

Ingredients per liter:

Tryptone	5.0 g
Beef Extract	3.0 g
Dextrose	1.0 g
agar	15.0 g

BRAIN HEART INFUSION AGAR:

31.0 g/600 mL water

(Highly enriched for fastidious organisms)

Ingredients per liter:

Calf Brains, Infusion from	200.0 g
Beef hearts, infusion from	250.0 g
Proteose Peptone	10.0 g
Glucose 2.0 g	
Sodium Chloride	5.0 g
Disodium phosphate	2.5 g
Agar	15.0 g

TRYPTIC SOY AGAR:

24.0 g/600 mL

(Enriched for fastidious organisms)

Ingredients per liter:

Tryptone (pancreatic digest of casein)	15.0 g
Soytone (Papiac soybean meal digest)	5.0 g
Sodium Chloride	5.0 g
Agar	15.0 g

LB AGAR, MILLER (Luria-Bertani)

24 g/600 mL

For the cultivation *Escherichia coli*, titering of coliphage, especially the fastidious lambda bacteriophage.

Ingredients per liter:

Bacto-Tryptone	10.0 g
Bacto-Yeast Extract	5.0 g
Sodium Chloride	10.0 g
Bacto-Agar	15.0 g
1 M CaCl ₂ (2 mL/L medium)	1.2 mL

(I have made the modification of CaCl₂.)

DEFINED SYNTHETIC MEDIUM (*E. coli*)

(from Bauman's *Microbiology*, 2nd, p 179.)

For 1 liter:

Na ₂ HPO ₄	16.4 g
KH ₂ PO ₄	1.5 g
(NH ₄) ₂ PO ₄	2.0 g
MgSO ₄ ·7H ₂ O	0.2 g
CaCl ₂	0.01 g
FeSO ₄ ·7H ₂ O	0.005 g
glucose	1.0 g

DEFINED SYNTHETIC MEDIUM (*E. coli*)

(from Alcamo's *Fund. of Micro*, p 144)

for 1 liter:

NH ₄ H ₂ PO ₄	1.0 g
NaCl	5.0 g
K ₂ HPO ₄	1.0 g
MgSO ₄	0.2 g
glucose	5.0 g