

LURIA BROTH (Miller's LB Broth)

#GCM04.0500
(for research only)

Formulation (g/L)

Tryptone:	10,00	Yeast Extract:	5,00
NaCl:	10,00		
Final pH (25°C):	7,0 ± 0,2		

Product: Dehydrated powder for the preparation of nutritionally rich liquid medium for the growth and maintenance of recombinant strains of *Escherichia coli* in molecular biology studies.

Quantity: 500g

Appearance: Beige powder. Autoclaved medium should be clear amber.

Storage: 2°C – 25°C. When not in use, keep container closed to avoid hydration.

Preparation:

Add 25g of the dehydrated medium to one liter of distilled water. Mix well and dissolve by heating with regular agitation. Boil for 1 minute in order to dissolve completely. Dispense in appropriate containers and sterilize by autoclaving at 121°C for 15 to 20 minutes. Store at 2°C to 8°C.

Supplements

Luria Broth (Miller's LB Broth) is a rich growth medium, which contains all the nutritional requirements for *E.coli*. Tryptone and Yeast Extract are the sources for carbon, nitrogen, vitamins, minerals, and amino acids essential for growth, whereas sodium chloride supplies essential electrolytes for transport and osmotic balance. For faster growth, medium can be supplemented with glucose (0.1%) or glycerol (0.4%). Many supplements, including antibiotics, are heat-sensitive and cannot be autoclaved. These should be filter-sterilized and added to the medium after it has cooled down.

Quality Control

Each lot is tested by inoculating freshly prepared medium with a single colony of *Escherichia coli* ATCC 23724 and observation after incubation at 35 ± 2°C for 18 – 24h

Bibliography

Lennox (1955) Transduction of linked genetic characters of the host by bacteriophage P1. *Virology* 1: 190-206
Sambrook, Fritsch and Maniatis (1989) In *Molecular cloning: a laboratory manual*, 2nd ed., Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY.
Atlas and Parks (1993) In *Handbook of Microbiological Media*. CRC Press, Inc. London.

ORDERING INFORMATION – Culture Media and Components

Reference #	Product Name	Quantity
GCM01.0500	LB Agar (Lennox)	500 g
GCM02.0500	LB Broth (Lennox)	500 g
GCM03.0500	Luria Agar (Miller's LB Agar)	500 g
GCM04.0500	Luria Broth (Miller's LB Broth)	500 g
GCM05.0500	Luria Agar (Miller's Modification)	500 g
GCM06.0500	Luria Broth (Miller's Modification)	500 g
GCM07.0500	Terrific Broth	500 g
GCM08.0500	Modified Terrific Broth	500 g
GCM09.0500	2xYT Medium	500 g
GCM10.0500	2xYT Agar	500 g
GCM11.0500	SOB Medium	500 g
GCM12.0500	SOC Medium	500 g
GCM13.0500	YPD Broth	500 g
GCM14.0500	YPD Agar	500 g
GCM15.0500	YNB w/o amino acids and w/o ammonium sulfate	500 g
GCM16.0500	YNB w/o amino acids with ammonium sulfate	500 g
GCM17.0500	LB Broth (Auto Induction Medium)	500 g
GCM18.0500	2xYT Broth (Auto Induction Medium)	500 g
GCM19.0500	Terrific Broth (Auto Induction Medium)	500 g
GCM20.0500	Super Broth (Auto Induction Medium)	500 g
GCM21.0500	Peptone	500 g
GCM22.0500	Bacterial Peptone	500 g
GCM23.0500	Tryptone	500 g
GCM24.0500	Yeast Extract	500 g
GCM25.0500	Bacteriological Agar	500 g
GCM26.0500	Dextrose	500 g
GCM27.0500	Sucrose	500 g

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