2xYT Agar

#GCM10.0500

(for research only)

Formulation (g/L)

Tryptone:	16,00	Yeast Extract:	10,00
NaCl:	5,00	Bacteriological Agar:	15.00
Final pH (25ºC):	7,0 ± 0,2		

Product: Dehydrated powder for the preparation of nutritionally rich solid medium (plates) for the growth and maintenance of recombinant strains of *Escherichia coli* in molecular biology studies and for growth of filamentous phage.

Quantity: 500g

Appearance: Beige powder. Autoclaved medium should be amber, slightly opalescent.

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

Preparation:

Add 46g 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 121ºC for 15 to 20 minutes. Cool to 45-50ºC and dispense into plates. Plates should be stored at 8ºC to 15ºC.

Supplements

2xYT Agar (2xTY Agar) is a rich growth medium, optimized for growth and maintenance of filamentous phage such as M13. It 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, as well as growth factors that allow phages to reproduce without weakening the host cells. Sodium chloride supplies essential electrolytes for transport and osmotic balance. 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 and prior to solidification.

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 ± 2ºC for 18 – 24h

Bibliography

Flint, *et al.* (2003) In Principles of Virology: Molecular Biology, Pathogenesis, and Control of Animal Viruses. 2nd ed. ASM Press, Washington DC.
Sambrook and Russell (2006) In The condensed protocols from Molecular cloning: a laboratory manual, 1st ed., Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY.

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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