19344 LB Agar, Vegitone
(Vegitone LB Agar; Luria Bertani Agar, Vegitone)

LB Agar Vegitone is free of animal derived material. It is used for the cultivation and maintenance of recombinant strains of *Escherichia coli* and may be used for routine cultivation of not particularly fastidious microorganisms.

Composition:

Ingredients	Grams/Litre
Tryptone (vegetable)	10.0
Yeast extract	5.0
Sodium chloride	5.0
Agar	15.0
Final pH 7.0 +/- 0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Appearance:	Light yellow coloured, homogeneous, free flowing powder.
Gelling:	Firm.
Colour and Clarity:	Yellow to amber coloured clear to slightly opalescent gel forms in petri plates.

Directions:
Suspend 35.0 g in 1000 ml distilled water. Heat to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Dispense as desired.

Principle and Interpretation:
This LB Agar is prepared as described by Lennox (1) for cultivation and maintenance of recombinant strains of *Escherichia coli*. The medium is nutritionally rich for the growth of pure cultures of recombinant strains. Strains which are generally derived from *Escherichia coli K12* are deficient in Vitamin B synthesis are further modified by specific mutation to create auxotrophic strains and are unable to grow on nutritionally deficient media.
Vegetable tryptone provides peptides and peptones while Vitamin B complex is provided by yeast extract. Sodium chloride provides sodium ions for the membrane transport and maintains osmotic equilibrium of the medium. Agar is the solidifying agents.

Cultural characteristics after 18-24 hours at 35°C

Organisms (ATCC)	Growth
Escherichia coli (25922)	+++
Escherichia coli (23724)	+++

References:

1. E.S. Lennox, Transduction of Linked Genetic Characters of the host by bacteriophage P1., Virology, 1, 190 (1955)
2. R.M. Atlas, Handbook of Microbiological Media, Ed. by Parks L., CRC Press, Inc. (1993)

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.