

LB Broth, Miller - Instructions for Use

Intended Use

BACGro™ LB Broth, Miller, when prepared as directed, is intended for the maintenance and cultivation of recombinant strains of *E. coli*. LB Broth, Miller is not intended for use in diagnosis, treatment, or prevention of disease in humans.

Product Summary

LB Broth, Miller, is used for the growth and maintenance of recombinant strains of *E. coli*. These strains of *E. coli* cannot produce Vitamin B, and therefore will not grow in nutrient deficient media. LB Broth, Miller provides the nutrients required for growth of *E. coli* and contains twice the sodium chloride in LB Broth, Lennox, which allows the user to select a medium with the most optimal salt concentration. Casein peptone supplies nitrogen, amino acids, and the carbon required for bacterial growth. Sodium chloride maintains osmotic balance. Yeast Extract is a source of vitamins and amino acids.

Formulation (per Liter)*

Casein Peptone	10.0 g
Yeast Extract	5.0 g
Sodium Chloride	10.0 g
Total	25.0 g/L

*Formula may be supplemented and/or adjusted as required to meet performance criteria

Directions

1. Add 25g of LB Broth, Miller powder to 1L of deionized water.
2. Stir to dissolve completely.
3. Autoclave at 121 degrees Celsius for 15 minutes.
4. Cool prior to use.

Precautions

This product is for laboratory use only and should only be used by qualified, trained laboratory personnel. Personnel should always use proper aseptic technique and observe all biohazardous precautions. All microbiological cultures should be presumed to be infectious.

Avoid ingestion, inhalation, or contact with skin and mucous membranes. If contact occurs, flush the area with clean water.

Quality Control Specifications

Gold Standard Diagnostics tests each lot of manufactured BACGro™ culture media utilizing appropriate control organisms and specifications as documented on the Certificate of Analysis. End users should perform quality control testing in accordance with government regulatory requirements and accreditation guidelines. The following specifications are routinely used for testing:

Appearance (dehydrated): Light beige, homogenous, free flowing powder, free of debris

Appearance (prepared): Clear, pale yellow to amber, with no precipitate or debris

pH (prepared): 6.8 – 7.2 at 25°C

Organism Performance:

Strain ID	Inoculum	Incubation			Result
		Time	Temp.	Environment	
<i>Escherichia coli</i> (ATCC® 8739)	≤100 CFU	18 - 24 hr.	35° C	Aerobic	Growth
<i>Escherichia coli</i> (ATCC® 25922)	≤100 CFU	18 - 24 hr.	35° C	Aerobic	Growth
<i>Bacillus subtilis</i> (ATCC® 6633)	≤100 CFU	18 - 24 hr.	35° C	Aerobic	Growth
<i>Staphylococcus aureus</i> (ATCC® 25923)	≤100 CFU	18 - 24 hr.	35° C	Aerobic	Growth

Limitations of the Procedure

This product is not labeled for use as a medical device, and is not intended to diagnose, treat, or prevent disease.

Due to variation in nutritional requirements, some strains may be encountered that grow poorly in this medium.

Storage and Expiration

BACGro™ LB Broth, Miller should be stored at 2 – 30 degrees Celsius. Because of the hygroscopic nature of dehydrated culture media, it should be stored in a dry place and the lid should remain tightly sealed. Media should be discarded if it is not free flowing or shows discoloration.

The expiration date printed on the label is applicable to media stored as directed.

Catalog Numbers

DCM6401 - LB Broth, Miller, 500g

DCM6405 - LB Broth, Miller, 5kg

DCM6410 - LB Broth, Miller, 10kg

Revision History:

Revision	Description	Effective Date
01	Document creation	19-MAR-2024