

Certificate of Analysis

Product: LB Medium, Lennox
Catalog No.: 3002-1X2
Lot No.: 76234

LB Medium, Lennox: Molecular Biology Certified Bacterial Growth Medium
Luria-Bertani, Rich Medium for the growth of *E. coli* and certified for plasmid and other bacterial cultures in liquid medium.

Catalog	Numbers	and	Sizes:	
Powder	Pouches	Capsules	Large	Capsules
3002-122	3002-175	3002-121	3002-136	
3002-132		3002-131	3002-146	
3002-142		3002-141	3002-156	
3002-152		3002-151		
3002-162				

Formulation and Molecular Biological Specifications of Components:

Contents Per Liter: 10 g Tryptone, 5 g Yeast Extract, 5 g NaCl. Biological buffers have been added for proper pH adjustment. Gelatin capsules are produced in a facility that meets the FDA's recent guidance as being derived from BSE-free herds that are born, raised, and slaughtered in the United States. Gelatin large capsules are derived from raw materials that are not of UK origin or from any other country on the United States of America Department of Agriculture or European Community prohibited list for BSE.

Reference: Sambrook, J., et al (1989) Molecular Cloning, A Laboratory Manual, 2nd Ed. CSH Press.

Recommended Use:

Capsules: Add 20 capsules per liter of purified water.
Powder: Add 20 g of powder per liter of purified water.
Large Capsules: Add 4 large capsules per liter of purified water.
For laboratory use only.

Storage:

Store sterile LB Medium, Lennox at ambient temperature (15-30°C). Powder medium is hygroscopic, therefore minimize exposure to air to prolong shelf life of media.

Shelf**Life:**

In airtight closed container or pouch: 4 years.

Quality Assurance Information

All Mp Biomedicals products are thoroughly tested to ensure reliable results in the laboratory. The following paragraphs describe the preparation and quality control procedures.

Media**Preparation:**

Reagents are tested and chosen for their ability to promote optimum growth of *E. coli* when combined in LB Medium, Lennox formulations. Chosen reagents are combined in the accurate proportions according to the formula listed above and thoroughly blended for a uniform distribution. A sample of the blended formulation was used to prepare liquid. The combinations were mixed to dissolve components and then autoclaved at 121C for 15 minutes.

Note: Autoclaving at hotter temperatures or for longer periods will result in darkening of the sterile medium, (a darker color does not normally affect growth of cells, only the appearance of the sterile medium).

Quality**Control****Assay:**

LB Medium, Lennox liquid solutions were mixed by swirling to evenly disperse all components and visually inspected after autoclaving for complete dissolution of components. The pH of the medium was tested to insure that the proper specification was attained.

Acceptable pH range is 7.0 ± 0.5 at 25°C. Please note that the pH of LB Medium, Lennox liquid increases as the temperature of the solution decreases. Refer to the chart below.

Temperature and pH Comparison Chart

Temperature C	pH
15	6.9
20	6.8
25	6.7
30	6.6
35	6.5
40	6.4

Cell**Growth****and****Plasmid****Yield****Tests:**

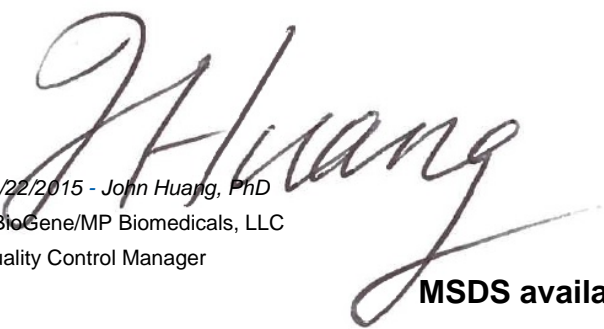
Duplicate 40 ml aliquots of autoclaved LB Medium from each test lot were inoculated with *E. coli* host cells containing a test standard pUC-based high-copy number plasmid (TSP). This plasmid contains the Kanamycin resistance gene. The cultures were aerated for 24 hours at 37°C in a shaking incubator with 20 ug/ml Kanamycin. A 10 ml culture was removed from each culture and processed by the RPM "Rapid Pure Miniprep" procedure to measure plasmid DNA yield. The pH of the cultures was measured and the cells in the remaining 30 ml of each culture were pelleted at 4000 xg, supernatant discarded, and pellets drained and weighed.

Results of Quality Control Assay

	Acceptable Ranges for Test Standard Lot	Small Capsules	Powder	Large Capsules
pH and Temp.	6.5-7.5 @ 25°C	n/a	7.07 @ 25.7°C	n/a
Clarity	Clear	n/a	Clear	n/a
pH (Harvest)	report result	n/a	7.85 @ 23.9°C	n/a
TSP Yield per 1.5 ml	up to 10 ug	n/a	2.49 ug	n/a
Cell Pellet Weight/30 ml	> 0.08 g	n/a	0.29 g	n/a

Conclusions:

This lot of LB Medium, Lennox is released for product sales.


10/22/2015 - John Huang, PhD
QBioGene/MP Biomedicals, LLC
Quality Control Manager

MSDS available online at www.mpbio.com