

## **LB Broth - Luria, Lennox, and Miller**

LB Broth media formulations have been industry standards for the cultivation of *Escherichia coli* since the 1950's<sup>1,2,3</sup>. These media have been widely used in molecular microbiology applications for the preparation of plasmid DNA and recombinant proteins<sup>4,5</sup>. The media are nutrient-rich formulations which provide peptides and peptones, vitamins, and trace elements. The three formulations differ in the amount of sodium chloride, thus providing selection of the appropriate osmotic conditions for the particular bacterial strain and desired culture conditions. The low salt formulations, Lennox and Luria, are ideal for cultures requiring salt-sensitive antibiotics such as Zeocin™.

### **Formulas**

<b>Ingredient</b>	<b>Luria</b>	<b>Lennox</b>	<b>Miller</b>
Tryptone	10	10	10
Yeast Extract)	5	5	5
NaCl	0.5	5	10

LB Broth (Luria).....	Powder.....	0101.....	500 g
LB Broth (Lennox).....	Powder.....	0102.....	500 g
LB Broth (Lennox).....	Liquid, Ready-to-Use.....	0113.....	5 x 500 ml
LB Broth (Miller).....	Powder.....	0103.....	500 g
LB Broth (Miller).....	Liquid, Ready-to-Use.....	0114.....	5 x 500 ml

*See also LB\*Booster™, a medium supplement which improves recombinant protein production in LB Broth.*

<sup>1</sup> Luria, S. E., and J. W. Burrous. 1955. Hybridization between *Escherichia coli* and *Shigella*. *J. Bacteriol.* 74:461-476.

<sup>2</sup> Lennox, E. S. 1955. Transduction of linked genetic characters of the host by bacteriophage P1. *Virology*. 1:190-206.

<sup>3</sup> Luria, S. E., J. N. Adams, and R. C. Ting. 1960. Transduction of lactose-utilizing ability among strain of *E. coli* and *S. dysenteriae* and the properties of the transducing phage particles. *Virology*. 12:348-390.

<sup>4</sup> Miller, J. H. 1972. Experiments in molecular genetics. Cold Spring Harbor Laboratory, Cold Spring Harbor, New York.

<sup>5</sup> Sambrook, J., E. F. Fritsch, and T. Maniatis. 1989. Molecular cloning: a laboratory manual, 2<sup>nd</sup> edition. Cold Spring Harbor Laboratory, Cold Spring Harbor, New York.

