



# Product Specification Summary

## Genetic Tools & Reagents

Catalog Number	40-3311-10
Product Name	Yeast Extract Bacterial Culture Grade; 100 g
Size	100 g
Description	Genetic Tools & Reagents
Component/Note	Hygroscopic. Store in a tightly closed container
Component/Note	CAS # 8013-01-2

### LB and derivative broths

LB broth is an all purpose media for the growth of bacterial culture. LB broth contains the enzymatic digestion product of casein commonly known as peptone (also termed as Tryptone), yeast extract, and sodium chloride. LB broth is the industry standard, nutritionally rich medium for the maintenance and culture of recombinant strains of *E. coli*. LB can support *E. coli* growth OD600 2 to 3 under normal shaking incubation condition (250 rpm). Enriched media (Terrific Broth, Super Broth) can support *E. coli* growth to OD600 5 to 8 under normal shaking incubation conditions. Lennox formulation has the same basic composition and is low in salt content (5 g/L). It is used for selective cultivation of certain strains of *E. coli* that are used in salt-sensitive antibiotic selections. Miller's modification has a relatively high salt content and is suitable for selective culture of certain strains. Both of the above LB Broth formulations are also available with agar for plating. Individual formulations for the broth and agar premixed powders are given below. Several other derivative broths with high concentrations of nutrients have been formulated for higher growth and thus more plasmid and protein yields.

**General application for all enriched media** 1. *E. coli* growth and propagation specifically for plasmid growth followed by DNA purification.

2. Competent cell preparation for plasmid cloning and transformation.
3. Protein expression and production.
4. Phage growth and phage DNA purification.

**Specific media usage and application** 1. LB Miller is for general *E. coli* growth and propagation.

2. LB Lennox specifically for *E. coli* growth and propagation with antibiotic selection that is sensitive to high salt.
3. Terrific Broth (TB) and Super Broth (SB) for high yield protein and plasmid purification.
4. SOB (super optimal broth) for preparation of competent cells.
5. SOC (super optimal broth with catabolic repressor) for plasmid transformation and growth of competent cells.
6. 2X YT for phage propagation.

**A complete line of convenient powdered premixed media formulations are available from Gene Link and are listed below with their composition.**

Scan the QR Code or visit the following links

Product Information

<http://www.genelink.com/geneprodsite/product.asp?p=16999>



Product Manual

[http://www.genelink.com/Literature/ps/M\\_Bacterial\\_Culture\\_V2.1.pdf](http://www.genelink.com/Literature/ps/M_Bacterial_Culture_V2.1.pdf)



Product MSDS

<http://www.genelink.com/Literature/ps/MSDSNH.pdf>



## Related Products

Product	Catalog No	Size
Omni-Array™ mRN Antisense strand amplification kit	08-0021-02	1 Kit
Omni-Array™ Sense Strand mRNA Amplification Kit	08-0011-02	1 Kit
Omni-Marker™ Universal unlabeled; 100 uL	40-3005-01	100 uL
Omni- Marker™ Universal unlabeled; 500 uL	40-3005-05	500 uL
Omni-Marker™ Universal unlabeled; 1 mL	40-3005-10	1 mL
Omni- Marker™ Low unlabeled; 100 uL	40-3006-01	100 uL
Omni-Marker™ Low unlabeled; 500 uL	40-3006-05	500 uL
Omni- Marker™ Low unlabeled; 1 mL	40-3006-10	1 mL
GScan Marker Tamra Labeled 50 bp - 600 bp; 100 uL	40-3061-01	100 uL
GScan Marker Tamra Labeled 50 bp - 600 bp; 500 uL	40-3061-05	500 uL
Omni-Marker™ GScan-1 Tet labeled 50 bp-1kb	40-3071-01	100 ul
Omni-Marker™ GScan-1 Tet labeled 50 bp-1kb	40-3071-05	500 ul
Omni-Marker™ GScan-2 Tet labeled 50 bp- 600 bp	40-3072-01	100 ul
Omni-Marker™ GScan-2 Tet labeled 50 bp- 600 bp	40-3072-05	500 ul
GScan Marker Hex Labeled 50 bp - 600 bp; 100 uL	40-3081-01	100 uL