



# Product Specification Summary

## Genetic Tools & Reagents

|                |  |
|----------------|--|
| Catalog Number | 40-3301-01   |
| Product Name   | Agar Type A Bacterial Culture Grade; 1 Kg                  |
| Size           | 1 Kg   |
| Description    | Genetic Tools & Reagents                                   |
| Component/Note | Store in a tightly closed container                        |
| Component/Note | CAS # 9002-18-0; Form: White to light cream-colored powder |
| Storage        | Store at Room temperature                                  |

### 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=16995>



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 |