

# Terrific Broth

For cultivating recombinant strains of *Escherichia coli*.

Terrific Broth was developed by TARTOFF and HOBBS (1987) to improve yield of plasmid DNA from transformed *E. coli*.

## Mode of Action

Tryptone and yeast extract serve as nutritious base to allow higher plasmid yield. The medium is phosphate buffered to prevent cell death due to a drop in pH. Glycerol serves as carbon and energy source.

## Typical Composition (g/liter)

Tryptone 12.0; Yeast Extract 24.0; Potassium Hydrogen Phosphate, dibasic 9.4; Potassium Phosphate, monobasic 2.2.

## Preparation

Suspend 47.6 g in 1 liter of purified water, add 4 ml Glycerol and autoclave for 15 minutes at 121°C.

pH: 7.2 ± 0.2 at 25 °C.

the prepared medium is clear and yellowish-brown. When stored at 2-8 °C in the refrigerator the medium can be used for up to 4 weeks.

## Experimental Procedure and Evaluation

Use appropriate references for recommended test procedures.

## Results

Growth is indicated when the medium gets turbid.

## Literature

**Tartoff, K.D., and c.a. Hobbs.** 1987. Improved media for growing plasmid and cosmid clones. Bethesda Research Laboratories Focus **9**:12.

**Sambrook, J., E. F. Fritsch, and T. Maniatis.** 1989. Molecular cloning: a laboratory manual, 2<sup>nd</sup> ed. Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y.

## Ordering Information

Product	Merck Cat. No.	Pack size
Terrific Broth	1.01629.0500	500 g
Glycerol	1.04093.1000	1000 ml

## Quality control

Test strains	Inoculum ca. cfu/ml	Growth after 24 h at 35°C aerobically cfu/ml
<i>Escherichia coli</i> (C600) ATCC 23724	10	> 10 <sup>8</sup>
<i>Escherichia coli</i> (HB101) ATCC 33694	10	> 10 <sup>8</sup>
<i>Escherichia coli</i> (JM103) ATCC 39403	10	> 10 <sup>8</sup>
<i>Escherichia coli</i> (JM107) ATCC 47014	10	> 10 <sup>8</sup>
<i>Escherichia coli</i> (JM110) ATCC 47013	10	> 10 <sup>8</sup>
<i>Escherichia coli</i> (DH-5) ATCC 53868	10	> 10 <sup>8</sup>