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ProductInformation

TERRIFIC BROTH (MODIFIED)

Product Number T 0918

Store at room temperature

Product Description

Terrific Broth (TB) has been formulated for optimum growth of *Escherichia coli*. Test organisms are *Escherichia coli* (ATCC #25922) and *Bacillus subtilis* (ATCC #6051).

Components

<u>Item</u>	<u>g/L</u>
Enzymatic Casein Digest	12.0
Yeast Extract	24.0
Potassium phosphate, dibasic, anhydrous	9.4
Potassium phosphate, monobasic, anhydrous	2.2

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Concentrations greater than 1x are not recommended. Glycerol is not included, but is required.

Preparation Instructions

Suspend 47.6 g of Terrific Broth (Modified) in 900 ml of deionized water. Add 10 g (8 ml) of glycerol (G 5150). Add sufficient deionized water to bring the volume to 1 L and autoclave for 20 minutes at 121 °C.

Procedure

Preparation of Working Stocks:

Cells from one colony of *E. coli* were transferred to 50 ml of sterile Terrific Broth (Modified) in a 250-ml baffled shake flask (Catalog No. F 0644) with a silicone sponge closure (Catalog No. C 0921). The flask was shaken overnight at 37 °C. The following morning the cells were centrifuged at $800 \times g$ for 10 minutes. The supernatant was discarded and the cell pellet was resuspended in 20 ml of fresh Terrific Broth (Modified). This working stock can be used immediately or divided into aliquots in sterile cryogenic freezing vials and stored at -70 °C.

Results

Starter culture was prepared by adding 0.3 ml of working stock to 50 ml of Terrific Broth (Modified) in a 250-ml baffled shake flask with a silicone sponge closure. The flask was shaken overnight at 300 rpm at 37 °C (New Brunswick G-2 rotary shaker). 1.0 ml of starter culture was immediately transferred to 50 ml of fresh Terrific Broth (Modified) in a 250-ml shake flask. The cells were shaken overnight at 300 rpm at 37 °C and the OD₆₄₀ was measured in 2-hour increments. The OD₆₄₀ for *E. coli* was 12.0 within eight hours. The OD₆₄₀ for *B. subtilis* was 8.0 within eight hours.

CAP/JWM 4/04