Super Broth No. II

M1689

Super Broth No. II is used for the cultivation of recombinant strains of *Escherichia coli*

Composition**

Ingredients	Gms / Litre
Tryptone	12.000
Yeast extract	24.000
Dipotassium phosphate	11.400
Monopotassium phosphate	1.700
Final pH (at 25°C)	7.2±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 49.1 grams in 1000 ml distilled water containing 5 ml glycerol. Heat if necessary to dissolve the medium completely. Dispense in tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 mins.

Principle And Interpretation

The rearrangement of genetic information within and among DNA molecule encompasses a variety of processes, collectively placed under the heading of genetic recombination (1). Bacteria that have undergone recombination, need to be grown in an enriched medium. Super Broth No. II is a modification of Super Broth, developed by Tartoff and Hobbs (2).

High amount of tryptone and yeast extract, make the medium highly nutritive for the growth of recombinant strains of E.coli . Phosphate provide buffering to the medium.

Quality Control

Appearance
Cream to yellow coloured homogeneous free flowing powder

Colour and Clarity of prepared medium
Amber coloured clear solution without any precipitate

Reaction
Reaction of 4.9% w/v aqueous solution at 25°C. pH : 7.2±0.2

pH
7.00-7.40

Cultural Response
M1689: Cultural characteristics observed after an incubation at 35-37°C for 18- 24 hours.

Organism	Inoculum (CFU)	Growth
Cultural Response		
Escherichia coli ATCC 25922	50-100	good-luxuriant
Escherichia coli ATCC 23724	50-100	good-luxuriant
Staphylococcus aureus ATCC 25923	50-100	good-luxuriant

Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label.

Reference

1.Nelson D.L, Cox M.M, 2005 Lehninger Principles of Biochemistry, 4th edi, W.H. Freeman and Company. New York.
2.Tartoff and Hobbs . 1987. Bethesda Research Laboratories FOCUS 9:12.

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