

TERRIFIC BROTH

TEBR-00P-500

- **Principle**

Terrific Broth is a medium which supports a high cell density and, in the case is formulated for optimum growth of *E.coli*, maintains growth in the logarithmic phase for a long time. As a result, it yields a greater number of recombinant proteins and plasmic DNA. In some circumstances it substitutes LB Broth (Lennox) (LBBR-00P-500) used in genetic studies.

Tryptone provide nitrogen, vitamins, minerals and amino acids essential for growth Yeast extract is source of vitamins, particularly the B-group. Potassium phosphates act as a buffer system to prevent cell death.

The source of carbohydrates and carbon is glycerol that is not fermented to acetic acid as glucose and does not lead to confusing results.

- **Composition**

Ingredients	g/L
Dipotassium phosphate	12.54
Tryptone	12.00
Monopotassium phosphate	2.31
Yeast extract	24.00

- **Preparation**

Suspend 50.8 grams of the medium in 900 ml of distilled water. Mix well and add 4 ml of glycerol. Adjust to a final volume of 1000 ml and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Dispense into appropriate containers and sterilize in autoclave at 121°C for 15 minutes.

- **Applications and use**

- Carry out the experimental procedure according to appropriate use or purpose.

- Inoculate and incubate at a temperature of 35±2 °C for 18-24 hours.

- **Quality control**

Solubility	w/o rests
Appearance	Fine powder
Colour of the dehydrated medium	Beige
Colour of the prepared medium	Amber
Final pH (25 °C)	7.2 ± 0.2

- **Microbiological test**

Incubation conditions: 35±2 °C / 18-24 h.

Microorganisms	ATCC	Specification
<i>Escherichia coli</i>	23724	Good growth
<i>Escherichia coli</i>	33694	Good growth
<i>Escherichia coli</i>	33849	Good growth
<i>Escherichia coli</i>	39403	Good growth
<i>Escherichia coli</i>	47014	Good growth

- **Storage**

The product is highly hygroscopic; keep the container always closed and store it properly as per the conditions mentioned on the label. The declared expiry is valid only when stored as per the conditions mentioned on the label. Temp. Min.:2 °C Temp. Max.:25 °C.

Note: Sterilize media immediately after reconstitution.

- **Bibliography**

Joseph Sambrook, David W. Russell. The condensed protocols from molecular cloning: a laboratory manual

- **Product use limitation**

This product is developed, designed and supplied exclusively for research use only. It is not intended for diagnostic applications or drug development, and it is not suitable for administration to humans or animals.