



Reference : 02-474

Scharlau Microbiology - Technical data sheet

Product :
TERRIFIC BROTH

Also known as

Peptone water for Genetics

Specification

Liquid culture medium used for the massive growth of recombinant *Escherichia coli* strains.

Formula * in g/L

Tryptone..... 12,00
Yeast extract..... 24,00
Dipotassium phosphate..... 9,40
Monopotassium phosphate..... 2,20

Final pH 7,2 ±0,2 at 25 °C

* Adjusted and /or supplemented as required to meet performance criteria

Directions

Dissolve 47.6 g of powder in 1 litre of distilled water. Add 4 ml of glycerol. Bring to the boil and distribute into suitable vessels. Sterilize by autoclaving for 15 minutes at 121 ° C.

Description

This medium was developed by Tartoff and Hobbs to improve the yield of *E. coli* recombinant strains. This medium is compatible with a high cell density, maintaining the organism in the logarithmic phase of growth over a long time period. This provides a higher yield of recombinant proteins and plasmid DNA. In many cases this medium is replaced by the classic formulation of LB broth.

Technique

Any of the standardised techniques described in the Bibliography of references may be used.

Quality control

Incubation temperature: 35 °C ± 2.0 **Incubation time:** 24 h

Inoculum: Practical range 100 ± 20 CFU. min. 50 CFU (productivity).

Microorganism	Growth	Remarks
<i>Escherichia coli</i> ATCC® 25922	Good	-
<i>Escherichia coli</i> ATCC® 8739	Good	-
<i>Escherichia coli</i> ATCC® 35218	Good	-
<i>Escherichia coli</i> ATCC® 11775	Good	-

References

- . ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- . SAMBROC, J., E.F. FRITSCH, T. MANIATIS (1989) Molecular Cloning: A laboratory Manual. 2a Ed., Cold Spring Harbor Press. Cold Spring Harbor, USA.
- . TARTOFF, K.D. & C.A. HOBBS (1987) Improved media for growing plasmids and cosmid clones. Bethesda Research Laboratories Focus 9:12.

Storage

For laboratory use only. Keep tightly closed, away from bright light, in a cool dry place (+4 °C to 30 °C).