

Enterobacteriaceae Enrichment Broth – Mossel (acc. to harm. Method of EP/USP/JP)

Medium proposed by Mossel et al. (1963,1964) for the selective enrichment of all species of *Enterobacteriaceae*

General Information

This medium complies with the recommendations of the harmonised method in the European Pharmacopeia 5.6 and the United States Pharmacopeia 29 (2006).

Mode of Action

The undesired, accompanying bacterial flora is almost completely inhibited by brilliant green and ox bile. Dextrose favours the growth of all Enterobacteriaceae. The strong buffering capacity of the culture medium prevents the formed acid from killing the culture.

Typical Composition (g/litre)

Peptone from gelatine 10.0; D(+)-glucose 5.0; oxbile, dried 20.0; brilliant green 0.015; di-sodium hydrogen phosphate - dihydrate 8.0; potassium dihydrogen phosphate 2.0.

Preparation

Suspend 45.0 g/litre, dispense 100 ml into test tubes and autoclave under mild conditions (5 min at 121 °C), or heat at 100 °C for 30 min in a waterbath or flowing steam.

Do not autoclave.

pH: 7.2 ± 0.2 at 25 °C.

The prepared broth is clear and green

Experimental Procedure and Evaluation

Inoculate the broth with the sample material.

Incubation: 24 - 48 hours at 35 °C aerobically (*E.coli*/*Pseudomonas aeruginosa*: up to 24 hours, *Staphylococcus aureus*: up to 48 hours).

If the medium shows bacterial growth, transfer some of the resulting material to a selective culture medium.

Literature

European Pharmacopeia 5.6, Chapter 2.6.13 B (Harmonised Method), 2006

United States Pharmacopeia 29 - NF 24, Chapter 62, Microbial examination of nonsterile products: Tests for specified microorganisms, 2006

Ordering Information

| Product | Ordering No. | Pack size |
|---|--------------|-----------|
| Enterobacter Enrichment Broth MOSSSEL (acc. harm. Method EP/USP/JP) | 1.05403.0500 | 500 g |

Quality Control

| Test strains | Inoculum (CFU) | Growth |
|---|----------------|--------|
| <i>Escherichia coli</i> ATCC 8739 | < 100 | + |
| <i>Pseudomonas aeruginosa</i> ATCC 9027 | < 100 | + |
| <i>Staphylococcus aureus</i> ATCC 6538 | > 100 | - |