FERMENTATION BROTH BASE

Liquid medium for the carbohydrate utilization test

Typical Formula – (g/l)

Peptone	10.0
Beef Extract	1.0
Sodium chloride.	5.0
Bromocresol purple	0.02

Directions

Suspend 16g in 1000ml of cold distilled water. Heat to boiling until complete dissolution, distribute 4.5ml into tubes and sterilise by autoclaving at 121°C for 15 minutes. Cool to 45-50°C and add the suitable carbohydrate solution (e.g.: L-rhamnose and/or D-xylose and/or methyl alpha D-mannopyranoside 5 g in 100ml of distilled water; sterilise the solutions by filtration; add 0.5ml of solution to 4.5ml of Fermentation Broth Base)
Final pH 6.8 ± 0.2

Description

Fermentation Broth is a liquid medium prepared according to the formulation described by ISO 11290, useful for carbohydrate utilisation test. ISO 11290 recommends this medium for the confirmation tests of *L.monocytogenes*.

Technique

Using a loop, inoculate each of the carbohydrate utilisation broths with a pure culture. Incubate at 35/37°C for up to 5 days. Positive reactions (formation of acids) are indicated by the evolution of the colour from purple to yellow and occur mostly within 24 hrs to 48 hrs. *L.monocytogenes* is positive to rhamnose and methyl alpha D- mannopyranoside and negative to xylose.

User quality assurance

Positive control (L-rhamnose)
L.monocytogenes ATCC 19112
Negative control (L-rhamnose)
L.ivanovii ATCC 19119

Storage

Dehydrated medium: 10-30°C
User prepared medium in tubes: 1week at 2-8°C

Reference

• ISO 112901/2:1996/1998 -Microbiology of Food and animal feeding stuffs. Horizontal method for the detection and enumeration of *Listeria moncytogenes.*

Packaging

4014881	**Fermentation Broth Base**	**100 g (6.25 l)**
4014882	**Fermentation Broth Base**	**500 g (31.2 l)**