

MediaLab

Half Fraser broth (Fraser ½)

Selective pre-enrichment of *Listeria* from food and environmental specimens

CONTENTS

2 x 5 L bags

Ref. 0120216

STORAGE CONDITIONS

Store the half Fraser broth in its box at 2°C-25°C until its expiry date.

COMPOSITION

Theoretical formula

For 1 liter of purified water :

Meat peptone.....5 g
Casein peptone.....5 g
Meat extract.....5 g
Yeast extract.....5 g
NaCl.....20 g
Buffer mixture.....13.35 g
Esculin.....1 g
Lithium chloride.....3 g
Ammonium ferric citrate.....0.5 g
Acriflavin.....0.0125 g
Nalidixic acid.....0.01 g

This medium can be adjusted and/or supplemented according to the performance criteria required

SUMMARY AND EXPLANATION

The half Fraser broth is used for the selective pre-enrichment of *Listeria* in food and environmental specimens.

The enrichment phase complies with the standards EN ISO 11290-1 (1) and amendment A1 (2) for the detection of *Listeria monocytogenes* in foods

EXPECTED CRITERIA

Example of performance testing recommended for this media according to standard EN ISO 11133 :

Appearance

Brownish. *Presence of precipitates does not affect product.*

pH

7.2 ± 0.2

Sterility

Conform after 7 days incubations at 20-25°C and 30-35°C
The bags are validated by autoclaving cycle (F0>30)

Microbiological activity

Strains references	Inoculum requested	Incubation time and T°	Expected results
<i>Escherichia coli</i> ATCC 25922 • WDCM 00013	Between 1 000 and 10 000 CFU	24 h ± 2 h at 30°C ± 1°C	Inhibition after isolation on TSA
<i>Enterococcus faecalis</i> ATCC 19433 • WDCM 00009	Between 1 000 and 10 000 CFU	24 h ± 2 h at 30°C ± 1°C	Partial inhibition (<100 CFU) after isolation on TSA
<i>Escherichia coli</i> ATCC 25922 • WDCM 00013 + <i>Enterococcus faecalis</i> ATCC 19433 • WDCM 00009 + <i>Listeria monocytogenes</i> ATCC 13932 • WDCM 00021	Between 1 000 and 10 000 CFU Between 1 000 and 10 000 CFU Between 10 and 100 CFU	24 h ± 2 h at 30°C ± 1°C	Growth of blue-green colonies with opaque halos specific of <i>L. monocytogenes</i> (>10 CFU) after isolation on chromogenic medium for confirmation of <i>Listeria</i> species

Strains references	Inoculum requested	Incubation time and T°	Expected results
<i>Escherichia coli</i> ATCC 25922 • WDCM 00013 +	Between 1 000 and 10 000 CFU	24 h ± 2 h at 30°C ± 1°C	Growth of blue-green colonies with opaque halos specific of <i>L.</i> <i>monocytogenes</i> (>10 CFU) after isolation on chromogenic medium for confirmation of <i>Listeria</i> species
<i>Enterococcus faecalis</i> ATCC 19433 • WDCM 00009 +	Between 1 000 and 10 000 CFU		
<i>Listeria monocytogenes</i> ATCC 35152 • WDCM 00109	Between 10 and 100 CFU		

BIBLIOGRAPHY

1. EN ISO 11290-1 – Microbiology of food and animal feeding stuffs – Horizontal method for the detection of *Listeria monocytogenes*. Part 1 : Detection method.
2. EN ISO 11290-1/A1 – Microbiology of food and animal feeding stuffs – Horizontal method for the detection of *Listeria monocytogenes*. Part 1 : Detection method - AMENDMENT 1: Modification of the isolation media and the haemolysis test, and inclusion of precision data.