

PRODUCT INFORMATION

Fraser Broth Base

Cat. No. F06-102

DESCRIPTION

Fraser Broth Base is used for the selective enrichment of *Listeria* spp. This media was first described by Fraser and Sperber and it is used with a ferric ammonium citrate supplement for the rapid detection of Listeria from food and environmental samples. All Listeria species hydrolyze esculin, which reacts with ferric ions producing a blackening of the medium. Lithium chloride inhibits the growth of enterococci that can hydrolyze the esculin.

FORMULA (g/L)

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Tryptose	10.0 g	Monopotassium Phosphate	1.35 g
Beef Extract	5.0 g	Esculin	1.0 g
Yeast Extract	5.0 g	Nalidixic Acid	0.02 g
Sodium Chloride	20.0 g	Acriflavin	0.024 g
Disodium Phosphate	9.6 g	Lithium Chloride	3.0 g

Final pH: 7.2 ± 0.2 at 25 °C

*Grams per liter may be adjusted or formula supplemented to obtain desired performance.

PREPARATION

Mix 55 grams of the medium in one liter of purified water until evenly dispersed. Distribute and autoclave at 121°C for 15 minutes. Cool to room temperature. Aseptically add 5% Ferric Ammonium Citrate Solution.

QUALITY CONTROL SPECIFICATIONS

- 1. The powder is homogenous, free flowing and light beige.
- 2. Visually the prepared medium is yellow to amber with an opalescent top and clear to slight hazy with little or no precipitate.
- 3. Expected cultural response after 24-48 hours at 35 °C.

Version 01 - Date 02/28/24



ORGANISM	RESULT
Enterococcus faecalis ATCC 29212	Inhibited
Escherichia coli ATCC 25922	Inhibited
Listeria monocytogenes ATCC 7644	Good Growth – Esculin (+)
Listeria monocytogenes ATCC 19114	Good Growth – Esculin (+)
Pseudomonas aeruginosa ATCC 27853	Inhibited at 24 h
Staphylococcus aureus ATCC 25923	Inhibited at 24 h

STORAGE

Store the sealed bottle containing the dehydrated medium at 2 to 30°C. Once opened and recapped, place the container in a low humidity environment at the same storage temperature. Protect it from moisture and light. The dehydrated medium should be discarded if it is not free flowing or if the color has changed from the original color.

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