Product: Listeria Half Fraser Selective Suppl.-225 ml

Specification

Sterile selective supplement used for *Listeria* enrichment according to ISO 11290-1:2006.

Presentation

	Packaging Details	Shelf Life	Storage
10 Freeze dried vials Vial with: 3 ± 0.1 g	23x60 mm glass vials, tag labelled, White plastic cap - 10 vials per box.	49 months	2-25 ºC

Composition

Compositon (mg/vial)

Nalidixic acid. sodium salt..... 2.25 mg
Acriflavine.....2.81 mg
Ammonium ferric citrate ..... 112.50 mg

Reconstitute the original freeze-dried vial by adding
Sterile Distilled Water..... 6 ml

Note : Each vial is sufficient to supplement for 225 ml of medium base

Description /Technique

Description:

This supplement is added in Fraser broth base in order to obtain a selective complete medium for the isolation of *Listeria spp*.
The inclusion of lithium chloride inhibits the development of enterococci which also may hydrolyze esculin in the same way of *Listeria*.
Thus, any darkness in the medium produced by the reaction of esculetin coming from esculin hydrolysis with iron present in the medium can be taken as a presumptive presence of *Listeria*.
Moreover, it seems the ferric citrate helps *L. monocytogenes* development.

Technique:

Collect, dilute and prepare samples and volumes as required according to specifications, directives, official standard regulations and/or expected results.
Reconstitute the vial with 6 ml of the sterile diluent in aseptic conditions and add it to 225 ml of sterilized Fraser Broth base cooled to 50ºC.
Do not overheat once suplemented.
Pour the complete medium into tubes and inoculate.
Incubate the tubes in aerobic atmosphere at 35 ± 2ºC for 24-48h.
Incubation times longer than those mentioned above or different incubation temperatures may be requied depending on the sample or the specifications.
After incubation, the isolation is carried out on the Oxford Selective Agar or any other selective agar for Listeria spp, observing any blackening of the medium due to esculin hydrolysis, typical for *Listeria strains.*

Quality control

Physical/Chemical control

Color : Dark Orange - Brown -

Microbiological control

Reconstitute 1 vial as indicated in COMPOSITION; shake and dissolve completely

Add 1 vial to 225/ 250 ml of medium base. DO NOT HEAT once supplemente

Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020.

Aerobiosis. Incubation at 30 ± 1 ºC during 25 ± 1 h.

Microorganism	Growth
Escherichia coli ATCC® 8739, WDCM 00012	Inhibited. Confirm in TSA at 37ºC±1 reading 24 ± 3h
Enterococcus faecalis ATCC® 19433, WDCM 00009	Partial Inhibition. Confirm in TSA at 37ºC±1 reading 24 ± 3h.
L. monocytogenes ATCC® 13932, WDCM 00021	Good. Black medium. Positive esculine
L. monocytogenes ATCC® 35152, WDCM 00109	Good. Black medium. Positive esculine

Sterility control

Add 5 ml of the sample to:
100 ml TSB and 100 ml Thioglycollate.
Incubation 48 h at 30-35 ºC and 48 h at 20-25 ºC: NO GROWTH.

Bibliography

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