

Scharlau Microbiology - Technical Data Sheet

Product: Bile Esculin Agar

Specification

Culture medium for Lancefield's D group streptococci identification in food samples, and others samples.

Presentation

20 Tubes - Slant	Packaging Details	Shelf Life	Storage
Tube 16 x 113 mm with: 6,2 ± 0,3 ml	1 box with 20 tubes, 16x113 mm glass tubes, ink labelled and metalic cap.	12 months	8-25°C

Composition

Composition (g/l):	
Meat extract	3.00
Peptone	5.00
Bile salts	20.0
Ferric citrate	0.50
Esculin	1.00
Agar	15.0

Description /Technique

Description

This medium formulation is based on the modification by Facklam and Moody of the original formulation by Swan to verify the esculin hydrolysing capacity of streptococci and their resistance to bile salts which inhibit Gram positive bacteria. In fact, this medium can be used as a substitute KAA Confirmative Agar, but as it does not have the same selectivity. It is used as a substrate to verify the two assays simultaneously in the biochemical tests that identify enterococci.

Technique

To inoculate tubes follow the standard laboratory methods or the applicable norms: stab inoculation,loop inoculation etc. The assay is performed by inoculating the surface of a slant with a pure culture of the organism to be verified. After the 24 hours incubation at 37°C, it may produce translucent colonies, surrounded by black haloes or zones, due to esculin hydrolysis. Resistance to bile salts is indicated by the growth.

The final identification of the microorganism must be completed with other biochemical tests such as: salt tolerance test, and other tests that the technician considers appropriate.

Quality control

Physical/Chemical controlColor : Yellow greenishpH: 7 ± 0.2 at 25°C

Microbiological control

Loop spreading

Aerobiosis. Incubation at 37 °C±1, reading after 24-48±2h

Microorganism

Growth

Enterococcus faecalis ATCC[®] 19433 Enterococcus faecalis ATCC[®] 29212

Good - Esculin Positive reaction Good - Esculin Negative

Good - Esculin Positive reaction

Escherichia coli ATCC[®] 25922 Sterility Control

Incubation 48 hours at 30-35°C and 48 hours at 20-25°C: NO GROWTH Check at 7 days after incubation in same conditions



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