

Bile Aesculin Agar

Selective medium for the preliminary identification of group D streptococci.

TYPICAL FORMULA	(g/l)
Beef Extract	3.0
Meat Peptone	5.0
Esculin	1.0
Oxgall	40.0
Ferric Citrate	0.5
Agar	14.0
Final pH 6.4 ± 0.2 at 25°C	

DESCRIPTION

Bile Aesculin Agar is used for the selective isolation and differentiation of enterococci and streptococci (serology group D) from food and pharmaceutical products. This medium is not intended for use in the diagnosis of disease or other conditions in humans.

PRINCIPLE

Beef extract and meat peptone provide amino acids, nitrogen, carbon, vitamins and minerals. Oxgall is ox bile purified and dehydrated. It contains a mix of biliary salts and is used in media for enterobacteria, as selective agent, because inhibit Gram-positive bacteria other than Group D streptococci. Esculin is a glucoside which is hydrolysed by Group D streptococci to form aesculetin and dextrose. Aesculetin combines with ferric citrate in the medium to form a dark brown or black complex which is indicative of a positive result. Agar is the solidifying agent.

PREPARATION

Suspend 63.5 g of powder in 1 liter of deionized or distilled water. Bring to boil and shake until completely dissolved. Sterilize at 121°C for 15 minutes. Cool up to 45-50°C. Dispense in Petri dishes.

TECHNIQUE

Inoculate the medium by streaking directly the sample onto the agar surface.

Incubate at 36 ± 1°C for 18-24 hours in aerobic atmosphere.

INTERPRETATION OF RESULTS

Group D streptococci grow on this medium producing a dark brown color around the colonies.

STORAGE

The powder is very hygroscopic, store the powder at 10-30°C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared plates at 2-8°C away from light.

WARNING AND PRECAUTIONS

For professional use only. Operators must be trained and have certain experience in the laboratory methods. Please read the instructions carefully before using this product. Reliability of assay results cannot be guaranteed if there are any deviations from the instructions in this document.

Consult the Safety Data Sheet (SDS) for information regarding hazards and safe handling practices.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to the national and local regulations in force.

REFERENCES

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PRODUCT SPECIFICATIONS

NAME

Bile Aesculin Agar

PRESENTATION

Dehydrated medium

STORAGE

10-30°C

PACKAGING

Ref.	Content	Packaging
620210	100 g	100 g of powder in plastic bottle
610210	500 g	500 g of powder in plastic bottle
6102105	5 kg	5 kg of powder in plastic bottle

pH OF THE MEDIUM

6.4 ± 0.2

USE

Bile Aesculin Agar is used for the selective isolation and differentiation of enterococci and streptococci (serology group D) from food and pharmaceutical products

TECHNIQUE

Refer to technical sheet of the product

APPEARANCE OF THE MEDIUM

Powder medium

Appearance: free-flowing, homogeneous

Colour: greenish, light to medium beige

Ready-to-use medium

Appearance: slightly opalescent

Colour: greenish to medium amber

SHELF LIFE

4 years

QUALITY CONTROL

- Control of general characteristics, label and print
- Microbiological control
Inoculum for productivity: 50-100 CFU
Inoculum for selectivity: 10⁴-10⁶ CFU
Incubation Conditions: 24 h/ 36 ± 1°C

Microorganism

Enterococcus faecalis ATCC 19433

Streptococcus pyogenes ATCC 19615

Growth







Good

Inhibited

Characteristics

Blackening of the medium

TABLE OF SYMBOLS

LOT	Batch code		Consult instructions for use		Manufacturer		Use by
REF	Catalogue number		Temperature limitation		Contains sufficient for <n> tests		Keep away from sunlight



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