

BILE AESCULIN AGAR

Differential medium for group D streptococci isolation in foods and pharmaceutical products.

TYPICAL FORMULA (g/l)

Beef Extract	3.0
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.	

DIRECTIONS

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

DESCRIPTION

BILE AESCULIN AGAR is a differential medium for isolating Group D streptococci in foods and pharmaceutical products.

TECHNIQUE

Inoculate the medium by spreading with a sterile loop and incubate at 36 ± 1 °C for 18-24 hours. Organisms positive for esculin hydrolysis hydrolyze the glycoside esculin to esculetin and dextrose. Esculetin reacts with ferric citrate and form a dark brown or black complex.

QUALITY CONTROL

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: greenish, light to medium beige.

Prepared medium

Appearance: slightly opalescent.

Color: greenish to medium amber.

Incubation conditions: 36 ± 1 °C for 24 hours.

Microorganism	ATCC	Growth	Characteristics
<i>Enterococcus faecalis</i>	19433	good	Esculin hydrolysis
<i>Streptococcus pyogenes</i>	27853	none	

PERFORMANCE AND LIMITATIONS

Bile esculin test was originally formulated to identify enterococci. However, the properties of growth on 40% bile media and esculin hydrolysis are characteristics shared by most strains of Group D streptococci. The bile esculin test should be used in combination with other tests to make a positive identification.

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.



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REFERENCES

1. Ruoff, K.L. 1995. Streptococcus. Manual of Clinical Microbiology, 6th ed. American Society for Microbiology, Washington, D.C.
2. Facklam, R.R., and M.D. Moody. 1970. .Presumptive identification of group D streptococci: The bile esculin test. Appl. Microbiol. **20**:245.
3. NCCLS document M22-A2, 1996. Approved Standard.

PRESENTATION









Product	REF	
BILE AESCULIN AGAR (7.8 l)	610210	500 g
BILE AESCULIN AGAR (1.5 l)	620210	100 g

TABLE OF SYMBOLS

LOT Batch code	 Caution, consult accompanying documents	 Manufacturer	 Contains sufficient for <n> tests	IVD <i>In Vitro</i> Diagnostic Medical Device
REF Catalogue number	 Fragile, handle with care	 Use by	 Temperature limitation	 Keep away from heat source



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