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Section: Technical Manual	Subject Title: Bile Esculin Test	
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BILE ESCULIN TEST

Principle

This test determines the ability of an organism to grow in the presence of bile and to hydrolyze the glycoside esculin to esculetin and glucose. The test is used to presumptively identify Group D Streptococci.

Materials

Bile esculin agar slant / plate
Culture loop

Procedure

1. Heavily inoculate a bile esculin slant / plate with the suspect organism.
2. Incubate in O₂ at 35°C for 18-24 hr.

Interpretation

Positive: Presence of a dark brown to black colour on the slant.

Negative: No blackening of the medium. Growth may occur, but this does not indicate esculin splitting.

Quality Control

Each new lot of media should be tested with known control strains.

Positive:	<i>E. faecalis</i>	(ATCC 29212)
Negative:	Gp.B Strep.	(ATCC 13813)
No Growth:	Gp.A Strep.	(ATCC 19615)

References

1. MacFaddin JF, Biochemical Tests for Identification of Medical Bacteria, 2nd ed., Williams and Wilkins, Baltimore MD, 1980, p4-12.