

Bile Esculin Agar

Use and description:

For the isolation and presumptive identification of enterococci / group D streptococci. Enterococci has the ability to hydrolyse esculin and produce dark to black-coloured colonies with iron salt. Bile salts inhibits other gram positive bacteria.

Composition per liter:

Bile salts.....20.0 g
Agar.....15.0 g
Peptone.....8.5 g
Meat extract.....3.0 g
Ferric citrate.....0.5 g
Esculin.....1.0 g

Final pH of the ready to use medium: 6.9 ± 0.2

Medium preparation:

Add 48,8 grams of dehydrated culture medium to 1 liter of distilled water. Heat with repeated stirring to dissolve completely. Sterilise by autoclaving at 121°C for 15 minutes.

Quality specifications:

Dehydrated medium: homogeneous, brown fine powder.

Ready to use medium: dark amber gel , opalescent.

Microbiological response at 37 °C, after 18-24 hours incubation:

Organism	Growth	Esculin reaction
<i>Enterococcus faecalis</i> ATCC 29212	Good	+ / black colour
<i>Staphylococcus aureus</i> ATCC 25923	Poor	-
<i>Streptococcus pyogenes</i> ATCC 19615	Inhibited	-

Storage:

Dehydrated medium should be stored between 10 to 25°C. Once opened, place the container in a dark, dry place. The dehydrated medium should not be used if there is any lump or the color has changed from the original.