

Bile Esculin Disc

Intended Use

For detection of Esculin Hydrolysis in the presence of bile.

Summary

Group D streptococci hydrolyze esculin to esculetin and dextrose. Esculetin reacts with an iron salt such as ferric citrate to form a blackish brown coloured complex. Rochaix found that esculin hydrolysis is an important criterion in the identification of enterococci. Meyer and Schonfeld observed that when bile was added to esculin medium, around 60% enterococci were able to grow and split the esculin while other streptococci could not. When a comparative study was performed by Facklam and Moody for presumptive identification of Group D streptococci, they found the bile esculin test as a reliable means of identifying Group D streptococci and differentiating them from other streptococci groups.

Directions

1. Prepare Mueller Hinton Agar Plates.
2. Inoculate the entire agar surface of the plate three times, rotating the plate 60° between streaking to obtain even inoculation.
3. Swab the rim of the agar bed too.
4. Immediately place Bile esculin disc in the centre of the plate.
5. Tap the discs with some sterile needle or forceps after placing them on the agar for complete contact with the medium surface.
6. Invert the plates and incubate at 35°C-37°C for 18-24 hours.

Quality Control

Appearance: Blank Filter paper discs of 6mm diameter.

Cultural Response: Cultural response observed on Mueller Hinton Agar for 18-24 hours incubation at 35°C-37°C for standard cultures.

Organism (ATCC)

Escherichia coli (25922)

Enterococcus faecalis (29212)

Zone of Inhibition

No blackening of media around the disc

Blackening of media around the disc

Storage and Stability

Disc in routine use should be stored at 2°C– 8°C. Longer term storage should be at -20°C.

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Rochaix, 1924, C. R. Soc. Biol., 90:771.
2. Meyer and Schonfeld, 1926, Zentralbl. Bacteriol. Parasitenkd. Infektionskr. Hyg. Abt. I Orig., 99:402.
3. Facklam and Moody, 1970, Appl. Microbiol., 20:245.
4. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.

206020650050

Product description

Differentiation Discs

Pack Size

Single Vial (1x 50 Disc)

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.