

08382 Bacitracin Disks

Bacitracin Disks are used in the presumptive identification of group A β -hemolytic streptococci and allow for differentiation of group A β -hemolytic streptococci from other β -hemolytic streptococci. The bacitracin test should be performed in conjunction with a SXT susceptibility test as the combined results increase the sensitivity and predictive value of the bacitracin test.

Contents:

(1 package contains 50 discs.)

Sterile, 6mm diameter filter paper discs impregnated with 0.04 Units of Bacitracin.

Storage:

Store in the freezer below -18°C in the containers provided. Allow to equilibrate to room temperature before opening then return to freezer storage immediately after use.

Directions:

Prepare Blood Agar (Cat. No. 70133) plates and inoculate the plates with suspect organism by surface spreading technique to obtain confluent growth. Place the Bacitracin Disks aseptically onto the inoculated surface and press gently. Invert the plates and incubate at 35-37°C in 5-10% CO₂ for 18-24 hours till growth appears. Observe for the zone of inhibition around the disc.

Interpretation of results:

A zone of inhibition greater than or equal to 14 mm indicates susceptibility to bacitracin and is presumptive of group A streptococci. For further confirmation serological grouping should be performed.

Quality control:

The list below illustrates a range of performance control strains in routine use (Blood Agar plate at 35-37°C for 18-24 hours):

Test Organisms (ATCC)	Diameter of zone of inhibition
<i>Streptococcus pyogenes</i> (19615)	15 mm
<i>Streptococcus agalactiae</i> (27956)	< 14 mm

References:

1. E.M. Barnes, G.C. Mead, C.S. Impey, B.W. Adams, The effect of dietary bacitracin on the incidence of *Streptococcus faecalis* subspecies liquefaciens and related streptococci in the intestines of young chicks. Brit Poult Sci 19: 713-723. (1978)
2. E.J. Baron, S.M. Finegold, Bailey and Scott's diagnostic microbiology, 8th ed. St. Louis: Mosby (1990)
3. A. Balows, W.J. Hausler, K.L. Herman, et al., Manual of clinical microbiology, 5th ed. Washington, DC: ASM (1991)
4. MacFaddin J.F., Biochemical tests for the identification of medical bacteria., 3rd ed. Philadelphia: Lippincott Williams & Wilkins (2000)
- 5.

Precautions:

For in vitro diagnostic use only. Observe approved biohazard precautions and aseptic techniques. To be used only by adequately trained and qualified laboratory personnel. Sterilise all biohazard waste before disposal. Refer to Product Safety Data sheet.

