



SPS DISKS

- For in vitro use only -

Catalogue No. DS65

Our SPS Disks can be used for the presumptive identification of *Peptostreptococcus anaerobius* based on its sensitivity to sodium polyanetholsulphonate (SPS).

Studies performed by Wideman et al. and Graves et al. showed that all strains of *Peptostreptococcus anaerobius* are inhibited by SPS, while other Gram-positive cocci are resistant to SPS. The identification of *P. anaerobius* is significant since Wideman et al. found that *Peptostreptococcus anaerobius* may account for one-fifth to one-third of all Gram-positive cocci encountered in clinical specimens. Our SPS Disks contain 1-mg of sodium polyanetholsulphonate and when used as recommended all strains of *Peptostreptococcus anaerobius* give zones of inhibition ranging from 12 to 30-mm.

Recommended Procedure

1. Obtain a pure, overnight culture of the test organism and make an inoculum suspension equivalent to a 0.5 McFarland standard.
2. Swab or streak a sample of the suspension onto a non-selective anaerobic blood agar plate or Wilkins-Chalgren Anaerobic Plate in three directions to give a heavy confluent growth.
3. Aseptically place a SPS Disk on the agar surface.
4. Incubate anaerobically at 35°C for 48 hours.
5. Measure the zone of inhibition around the disk to the nearest millimeter.

Interpretation of Results

A zone of inhibition ≥ 12 -mm indicates SPS sensitivity (S), while a zone of inhibition < 12 -mm indicates resistance (R) to SPS.

Additional biochemical and/or serological tests should be performed on isolated colonies from pure culture in order to complete identification.

- Some strains of *P. micros* are sensitive to SPS. Microscopic differentiation is possible since *P. micros* appear as tiny cocci whereas cells of *P. anaerobius* appear as large coccobacilli
- To ensure the accuracy of the observed results, always run positive and negative controls along with the test organism

Quality Control

<u>Organism</u>	<u>Expected Results</u>
<i>Peptostreptococcus anaerobius</i> ATCC 27337	S SPS-sensitive
<i>Peptostreptococcus asaccharolyticus</i> ATCC 29743	R SPS-resistant

Storage and Shelf Life

Our SPS Disks should be stored at 4°C to 8°C, and protected from light. Under these conditions they have a shelf life of 26 weeks from the date of manufacture.

References

1. Balows A, Hausler WJ, Herman KL et al. Manual of clinical microbiology. 5th ed. Washington, DC: ASM, 1991.
2. Wideman PA, Vargo VL, Citronbaum D and Finegold SM. J. Clin. Micro. 4 (1976).
3. Graves MH, Morello JA and Knocka FE. Appl. Microbiol. 27 (1974).

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