
remel

SPS DISK

INTENDED USE

Remel SPS Disk is a reagent-impregnated disk recommended for use in qualitative procedures for presumptive identification of *Peptostreptococcus anaerobius*.

SUMMARY AND EXPLANATION

Sodium polyanethol sulfonate (SPS) is a synthetic, heat stable, anticoagulant which inhibits bactericidal agents in blood.¹ SPS has also been found to inhibit the growth of certain anaerobic cocci. Graves et al. used a reagent-impregnated disk to determine the susceptibility of anaerobic cocci to SPS. He reported, among anaerobic cocci only *P. anaerobius* is sensitive to SPS. In separate studies, Wideman and Wilkins verified the findings of Graves reporting an overall accuracy of 98% in the identification of *P. anaerobius* isolated from clinical specimens.^{2,3}

PRINCIPLE

The growth of *P. anaerobius* is inhibited by SPS. A positive test (sensitive) is indicated by a zone diameter of 12-27 mm around the SPS Disk.

REAGENTS

Reactive Ingredient: Sodium Polyanethol Sulfonate

PRECAUTIONS

This product is for *In Vitro* diagnostic use and should be used by properly trained individuals. Precautions should be taken against the dangers of microbiological hazards by properly sterilizing specimens, containers, and media after use. Directions should be read and followed carefully.

STORAGE

This product is ready for use and no further preparation is necessary. Store product in its original container 2-8°C until used. Allow product to equilibrate to room temperature (20-25°C) before use.

PRODUCT DETERIORATION

This product should not be used if (1) the disk color has changed from cream, (2) the expiration date has passed, (3) the desiccant has changed from blue to pink, or (4) there are other signs of deterioration. Protect disks from moisture by removing from the vial only those disks necessary for testing. Promptly replace the cap and return the vial to 2-8°C.

SPECIMEN COLLECTION, STORAGE, TRANSPORT

Specimens should be collected and handled following recommended guidelines.^{4,5}

MATERIALS REQUIRED BUT NOT SUPPLIED

(1) Loop sterilization device, (2) Inoculating loop, swabs, collection containers, (3) Incubators, alternative environmental systems, (4) Supplemental media, (5) Quality control organisms, (6) Forceps, (7) Ruler or caliper, (8) McFarland 0.5 Turbidity Standard (REF R20410) or equivalent, (9) Sterile saline.

PROCEDURE

1. Prepare a suspension of the test isolate in sterile saline. Adjust the suspension turbidity equal to a McFarland 0.5 standard or equivalent. **Note:** Control organisms should be tested simultaneously with the test isolate.
2. Using a sterile swab or inoculating loop, inoculate a blood agar plate with the suspension and streak the plate for confluent growth.
3. Using forceps, place an SPS Disk in the center of the plate.
4. Incubate the plate anaerobically for 48-72 hours at 35-37°C.
5. Measure the zone of inhibition around the disk with a ruler or caliper.

INTERPRETATION

Sensitive - Zone of inhibition equal to or greater than 12 mm
Resistant - No zone of inhibition or zone less than 12 mm

QUALITY CONTROL

All lot numbers of SPS Disk have been tested using the following quality control organisms and have been found to be acceptable. Testing of control organisms should be performed in accordance with established laboratory quality control procedures. If aberrant quality control results are noted, patient results should not be reported.

CONTROL	INCUBATION	RESULTS
<i>Peptostreptococcus anaerobius</i> ATCC® 27337	Anaerobic, 48 h @ 35-37°C	Sensitive
<i>Bacteroides fragilis</i> ATCC® 25285	Anaerobic, 48 h @ 35-37°C	Resistant

LIMITATIONS

1. The use of media containing gelatin or proteose peptone has been reported to increase the concentration of SPS needed to inhibit *P. anaerobius*, resulting in smaller zones of inhibition around the disk.^{2,3}
2. This test is only part of the overall scheme for identification of *P. anaerobius*. Additional testing is required for definitive identification. Consult appropriate references for further instructions.^{4,5}




BIBLIOGRAPHY

1. Graves, M.H., J.A. Morello, and F.E. Kocka. 1974. Appl. Microbiol. 27:1131-1133.
2. Wideman, P.A., V.L. Vargo, D. Citronbaum, and S.M. Finegold. 1976. J. Clin. Microbiol. 4:330-333.
3. Wilkins, T.D. and S.E.H. West. 1976. J. Clin. Microbiol. 3:393-396.
4. Murray, P.R., E.J. Baron, J.H. Jorgensen, M.L. Landry, and M.A. Pfaller. 2007. Manual of Clinical Microbiology. 9th ed. ASM Press, Washington, D.C.
5. Forbes, B.A., D.F. Sahm, and A.S. Weissfeld. 2007. Bailey and Scott's Diagnostic Microbiology. 12th ed. Mosby Elsevier, St. Louis, MO.
6. Summanen, P., E.J. Baron, D.M. Citron, C. Strong, H.M. Wexler, and S.M. Finegold. 1993. Wadsworth Anaerobic Bacteriology Manual. 5th ed. Star Publishing Co., Belmont, CA.

PACKAGING

REF R21140, SPS Disk.....25 Disks/Vial

Symbol Legend

REF	Catalog Number
IVD	In Vitro Diagnostic Medical Device
LAB	For Laboratory Use
	Consult Instructions for Use (IFU)
	Temperature Limitation (Storage Temp.)
LOT	Batch Code (Lot Number)
	Use By (Expiration Date)

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