



Antibiotic Sulphonamide Sensitivity Test Agar (ASS Agar)

M1485

Intended Use:

Recommended for testing the antimicrobial effectiveness of antibiotics and sulphonamides as well as for detecting the presence of antimicrobial substances in milk, urine and other fluids.

Composition**

Ingredients	g / L
Proteose peptone	10.000
HM peptone B #	10.000
Dextrose (Glucose)	2.000
Sodium chloride	3.000
Disodium hydrogen phosphate	2.000
Sodium acetate	1.000
Adenine	0.010
Guanine	0.010
Uracil	0.010
Xanthine	0.010
Agar	12.000
Final pH (at 25°C)	7.2±0.2

**Formula adjusted, standardized to suit performance parameters

Equivalent to Beef extract

Directions

Suspend 40.04 grams in 1000 ml purified / distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

Principle And Interpretation

Ericsson and Sherris (1) on behalf of the German Institute of Standardization (2) and World Health Organization (WHO) developed an accurate quantitative method for antibiotic sensitivity testing. WHO's Expert Committee on Antibiotics have set certain requirements to be fulfilled by Sensitivity Test Agar. Antibiotic Sulphonamide Sensitivity Test Agar (ASS Agar) fulfils these criteria. This media can be used for detecting the presence of antimicrobial substances in milk, urine and other fluids as cited by Ansorg and Sogard (3,4). The presence of various amino acids makes the media favourable for growth and testing of various fastidious organisms like *Listeria*, *Streptococci* and *Neisseria* etc.

Proteose peptone and HM peptone B extract provides nitrogen and carbon source, long chain amino acids, vitamins and other necessary nutrients to the organisms. Glucose serves as the carbon source. Disodium hydrogen phosphate helps in maintaining the pH and preventing the effect of pH change on antibiotic diffusion. The medium constituents do not inhibit the growth of the test organism. Therefore, the zones of inhibition obtained are solely due to the antibiotic used. Standard Methods are employed for sensitivity testing.

Type of specimen

Isolated Microorganism from clinical samples, dairy samples

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (5,6). For dairy samples, follow appropriate techniques for sample collection and processing as per guidelines (7,8). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic use. For professional use only. Read the label before opening the container. Wear protective gloves/ protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Well isolated colonies must be used.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.2% Agar gel.

Colour and Clarity of prepared medium

Yellow coloured, clear to slightly opalescent gel forms in Petri plates

Reaction

Reaction of 4.0% w/v aqueous solution at 25°C. pH : 7.2±0.2

pH

7.00-7.40

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Organism	Inoculum (CFU)	Growth	Recovery
# <i>Bacillus spizizenii</i> ATCC 6633 (00003*)	50-100	good	50-70%
\$\$ <i>Phocaeicola vulgatus</i> ATCC 8482	50-100	good	50-70%
<i>Enterococcus faecalis</i> ATCC 29212 (00087*)	50-100	good	50-70%
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC 25923 (00034*)	50-100	good	50-70%
<i>Streptococcus pyogenes</i> ATCC 19615	50-100	good	50-70%

Key : *Corresponding WDCM numbers.

Formerly known as *Bacillus subtilis* subsp. *spizizenii* \$\$ Formerly known as *Bacteroides vulgatus*

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 20-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (5,6).

Reference

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- Sogaard H., Andersen M., Huusom R., Dansk. Vet. Tidsskr., 61; 593-595 (1978).
- Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.

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IVD *In vitro* diagnostic
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Storage temperature



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CE Marking



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