MSB (Mitis Salivarius Sucrose Bacitracin) Agar

Medium used for the isolation and cultivation of Streptococci especially *Streptococcus mitis*, *Streptococcus salivarius*, and *Enterococcus faecalis*.

• CONTENTS (Liter)

Casein Enzymic Hydrolysate	15.0 g
Peptic Digest of Animal Tissue	5.0 g
Dextrose	1.0 g
Sucrose	50.0 g
Trypan Blue	0.075 g
Crystal Violet	0.0008 g
Dipotassium Phosphate	4.0 g
Agar	15.0 g

Final pH = 7.0 ± 0.2 at 25°C

• PROCEDURE

Suspend 90.08 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Aseptically add 2 vials of MSB Agar supplement (MB-M0787). Mix well. Pour into petri dishes.

MSB Agar supplement

1 vial contents (each vial is sufficient for 500mL of medium)

Potassium Tellurite	0.005 g
Bacitracin	0.1 IU

• INTERPRETATION

MSB (Mitis Salivarius Sucrose Bacitracin) Agar is a medium used for the isolation and cultivation of Streptococci especially *Streptococcus mitis*, *Streptococcus salivarius*, and *Enterococcus faecalis*. Casein enzymic hydrolysate and peptic digest of animal tissue provide carbon, nitrogen, vitamins and minerals. Dextrose and sucrose are carbohydrate sources. Trypan blue gives colonies a blue color. Crystal violet, potassium tellurite and bacitracin inhibit most Gram-negative bacteria and Gram-positive bacteria except streptococci and *Enterococcus faecalis*. Potassium phosphate is the buffering agent in the medium. Agar is the solidifying agent.

• TECHNIC

Inoculate the plates with spreading the specimen on surface of the medium using a sterile loop. Incubate at 36 ± 1°C for 18 - 48 hours under microaerobic condition. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium
Appearance: free-flowing, homogeneous
Color: bluish-light beige
Prepared medium
Appearance: clear to slightly opalescent
Color: deep blue
Incubation conditions: 36 ± 1°C / 18 - 48 hours under microaerobic condition

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
Enterococcus faecalis	29212	50-100	good	blue-black colonies
Streptococcus pyogenes	19615	50-100	good	blue
Escherichia coli	25922	≥10^3	partial to complete inhibited	-
Staphylococcus aureus	25923	≥10^3	inhibited	-

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration are evident. Store prepared medium at 2-8°C.

• REFERENCES

1. Gold, O.G., Jordan, H.V. and van Houte, J.: A selective medium for the isolation of Streptococcus mutans. Arch. Oral. Biol. 18:1357-1364, 1973.
2. Tanzer, J.M., Borjesson, A.C., Laskowski, L., Kurasz, A.B. and Testa, M.: Glucose-sucrose-potassium tellurite-bacitracin agar, an alternative to mitis salivarius-bacitracin agar for enumeration of Streptococcus mutans. J. Clin. Microbiol. 20:653-659, 1984.
3. MacFaddin. Media for isolation-cultivation-identification-maintenance of medical bacteria, vol. 1. Williams & Wilkins, Baltimore, Md, 1985.

• PACKAGE

Cat. No : MB-M0780 MSB (Mitis Salivarius Sucrose Bacitracin) Agar	500 G

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