

# Mitis Salivarius Agar



Medium used for the isolation and cultivation of *Streptococcus mitis*, *Streptococcus salivarius* and enterococci from grossly contaminated specimens.

## • CONTENTS (Liter)

Enzymatic Digest of Casein	15.0 g
Enzymatic Digest of Animal Tissue	5.0 g
Sucrose	50.0 g
Dextrose	1.0 g
Dipotassium Phosphate	4.0 g
Trypan Blue	0.075 g
Crystal Violet	0.0008 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 1 mL of Potassium Tellurite 1% supplement (MB-P1842). Mix well. Pour into petri dishes.

### Potassium Tellurite 1% supplement

1 vial contents

Potassium Tellurite                      0.1 g

## • INTERPRETATION

Mitis Salivarius Agar is a medium used for the isolation and cultivation of *Streptococcus mitis*, *Streptococcus salivarius* and enterococci from grossly contaminated specimens. Enzymatic digest of casein and enzymatic digest of animal tissue provide nitrogen, carbon, vitamins and minerals. Sucrose and dextrose are the carbohydrates. Dipotassium phosphate is the buffering agent. Trypan blue is absorbed by colonies of streptococci producing a blue color. Crystal violet and potassium tellurite 1% supplement inhibit most Gram-positive and Gram-negative bacteria except streptococci and enterococci. Agar is the solidifying agent.

## • TECHNIC

Inoculate the specimen using a sterile loop to the medium. 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 : slightly opalescent

Color: deep blue

Incubation conditions:  $36 \pm 1^{\circ}\text{C}$  / 18 - 48 hours under microaerobic condition

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Enterococcus faecalis</i>	29212	50-100	good	blue-black
<i>Streptococcus mitis</i>	49456	$10^2$ - $10^3$	good	blue
<i>Streptococcus salivarius</i>	13419	$10^2$ - $10^3$	good	blue "gum drop" shape
<i>Escherichia coli</i>	25922	$10^3$	partially inhibited	brown
<i>Staphylococcus aureus</i>	25923	$10^3$	partially inhibited	deep blue to black

## • 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. Store prepared medium at 2 - 8°C.

## • REFERENCES

1. Ruoff, Whiley and Beighton. 1999. *In* Murray, Baron, Pfaller, Tenover and Tenover (ed.), Manual of clinical microbiology, 7th ed. American Society for Microbiology, Washington, D.C.
2. Facklam, Sahm and Teixeira. 1999. *In* Murray, Baron, Pfaller, Tenover and Tenover (ed.), Manual of clinical microbiology, 7th ed. American Society for Microbiology, Washington, D.C.
3. Chapman. 1944. J. Bacteriol. 48:113.

## • PACKAGE

Cat. No : MB-M0621 Mitis Salivarius Agar	500 G
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