

Mitis Salivarius Agar Plate

Intended Use

Mitis Salivarius Agar Plate is recommended for the isolation of Streptococci, especially *Streptococcus mitis*, *Streptococcus salivarius* and *Enterococcus faecalis* from grossly contaminated specimens.

Summary

Mitis Salivarius Agar is prepared as described by Chapman for the isolation of Streptococci from mixed cultures showing alpha and gamma reactions on Blood Agar. This medium (with 1% potassium tellurite) is highly selective medium which enables to isolate Streptococci from highly contaminated specimens like exudates from body cavities and faeces etc., as it inhibits a wide variety of bacteria. Some authors have also used sodium azide in this medium to inhibit the growth of Gram-negative bacteria like *Proteus*. Beta-haemolytic Streptococci produce colonies that resemble *Streptococcus mitis*.

Principle

Casein enzymic hydrolysate and Peptic digest of animal tissue provide the essential growth nutrients. Dextrose and sucrose are the fermentable carbohydrates. Dipotassium phosphate buffers the medium. Trypan blue is an acidic, blue diazo dye while crystal violet is a basic dye and also a bacteriostatic agent which inhibits many Gram-positive organisms.

Formula*

Ingredients	g/L
Casein enzymic hydrolysate	15.0
Peptic digest of animal tissue	5.0
Dextrose	1.0
Sucrose	50.0
Dipotassium phosphate	4.0
Trypan Blue	0.075
Crystal Violet	0.0008
Agar	15.0
Final pH (at 25°C)	7.0 ± 0.2

*Adjusted to suit performance parameters.

Additional Material Required

Bacteriology Incubator.

Instructions for use

1. Open the sterile pack and remove the respective plate aseptically.
2. Inoculate/streak the plate as per standard procedure.
3. Incubate the plates in inverted position as per standard guidelines.

Reading and interpretation

1. After incubation, observe the microbial growth and count the colonies.
2. Interpretation is assured by user.
3. User is responsible to define the action limits as per standard guidelines and alert limits on the basis of trend analysis & other relevant data.

Quality Control

Appearance: Gel with smooth and even surface, without any cracks, bubbles and drying or shrinking of media.

Colour of Medium: Dark blue coloured, slightly opalescent gel in petriplates.

Quantity of Medium: 26 ± 2 g in 90 mm petriplate.

pH at 25°C ± 2°C: 7.0 ± 0.2

Organism (ATCC)	Growth	Colour of Colony
<i>Streptococcus mitis</i> (9811)	Good	Blue
<i>Streptococcus salivarius</i> (13413)	Good	Blue
<i>Streptococcus pyogenes</i> Strain Bruno (19615)	Good	Blue
<i>Enterococcus faecalis</i> (29212)	Good	Blue - black
<i>Escherichia coli</i> (25922)	Inhibited	-
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> (25923)	Inhibited	-

Storage and Shelf Life

1. Store between 15°C-25°C to avoid water condensation. Condensation can be prevented by avoiding quick temperature shifts and mechanical stress.
2. Under optimal conditions, the medium has a shelf life of 6 months. Use before expiry mentioned on the label.

Reference

1. Chapman, 1946, Am. J. Digestive Diseases, 13:105.
2. Snyder and Lichstein, 1940, J. Infect. Dis., 67:113.
3. Lichstein and Snyder, 1941, J. Bact., 42:653.
4. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product	Pack Size
205130950050	Mitis Salivarius Agar Plate	50 Plates

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.
