

Mitis Salivarius Veg Agar Base

Intended Use

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

Summary

This medium is developed by using Veg hydrolysate and Veg peptone which are free of BSE/TSE risks. Mitis Salivarius Veg Agar Base is the modification of Mitis Salivarius Agar Base which 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

Veg hydrolysate and Soya peptone 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
Veg Hydrolysate	15.0
Soya Peptone	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.

Storage and Stability

Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of Specimen

Clinical samples - Faeces

Specimen Collection and Handling

Ensure that all samples are properly labelled. Follow appropriate techniques for handling samples as per established guidelines. Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure. The samples must be stored and tested within the permissible time duration. After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions

1. Suspend 90.07 g of the powder in 1000 mL purified / distilled water.
2. Heat to boiling to dissolve the powder completely.
3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
4. Cool to 50°C-55°C and add 1 mL of sterile Potassium Tellurite 1% Solution (204160730010).
5. Mix well and pour into sterile petridishes.

Quality Control

Dehydrated Appearance: Light blue coloured, homogeneous, free flowing powder.

Prepared Appearance: Dark blue coloured, slightly opalescent gel forms in petridishes.

Cultural Response: Cultural characteristics observed after an incubation of 18 - 48 hours at 30°C-35°C with added 1 % Potassium Tellurite.

Organism (ATCC)	Growth	Colour of Colony
<i>Enterococcus faecalis</i> (29212)	Good	Blue - black
<i>Escherichia coli</i> (25922)	Inhibited	-
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> (25923)	Inhibited	-
<i>Streptococcus intermedius</i> (9895)	Good	Blue
<i>Streptococcus pyogenes</i> Strain Bruno (19615)	Good	Blue
<i>Streptococcus salivarius</i> (13413)	Good	Blue (gum drops)

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

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 description	Pack Size
201130570500	Dehydrated Culture Media	500 g
205130950050	Ready Prepared Plate	(90 mm) 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.
