

THAYER MARTIN AGAR

INTENDED USE:

Thayer-Martin Selective Agar is an enriched medium for the selective isolation of Neisseria species.

PRINCIPLE AND INTERPRETATION:

The Thayer Martin Agar contains nitrogenous nutrients in the form of casein and meat peptones, which neutralizes toxic fatty acids that may be present in the agar. Hemoglobin provides X factor (hemin) for Haemophilus species. Growth supplement is a defined supplement which provides V factor (nicotinamide adenine dinucleotide, NAD) for Haemophilus species and vitamins, amino acids, co-enzymes, dextrose, ferric ion and other factors which improve the growth of pathogenic Neisseria. This selective medium contains the antimicrobial agents, vancomycin, colistin and nystatin (V-C-N Inhibitor) to suppress the normal flora. Vancomycin is active primarily against gram-positive bacteria. Colistin inhibits gram-negative bacteria, including Pseudomonas species, but is not active against Proteus species. Nystatin inhibits fungi.

COMPOSITION:

Ingredients	Gr/Liter
Nutrient substrate	20 gr
Sodium chloride	5 gr
Agar	15 gr
Defibrinated Horse Blood	90 ml
Vancomycin	0,003 gr
Colistin	0,0075 gr
Nystatin	12500 Unit
Growth supplement	10 ml

***Formula adjusted, standardized to suit performance parameters

pH: 7,2 ± 0.2

PRECAUTIONS:

For professional use only. Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

TEST PROCEDURE:

The agar surface should be smooth and moist, but without excessive moisture. Streak the specimen as soon as possible after it is received in the laboratory. Alternatively, if material is being cultured directly from a swab, proceed as follows:

1. Roll swab directly on the medium in a large "Z" to provide adequate exposure of swab to the medium for transfer of organisms.
2. Cross-streak the "Z" pattern with a sterile wire loop, preferably in the clinic. If not done previously, cross-streaking should be done in the laboratory.
3. Place the culture as soon as possible in an aerobic environment enriched with 3-5% carbon dioxide.
4. Incubate at 35 ± 2°C and examine after overnight incubation and again after approximately 48 h.
5. Subculture for identification of N. gonorrhoeae should be made within 18-24 h.

User QC testing of exempt media for N. gonorrhoeae is strongly recommended by CLSI M22-A3.

QUALITY CONTROL:**1.Sterility Control:**

Incubation 48 hours at 30-35°C and 72 hours at 20-25°C: NO GROWTH

2.Physical/Chemical Control

pH: 7,2 ± 0,2

Appearance: Dark brown

3.Microbiological Control: Cultural response on Thayer Martin Agar at 35± 2 °C after 18 and 48 hours incubation.

Microorganism	Inoculum (CFU)	Results	
		Growth	Reaction
Neisseria gonorrhoeae ATCC 49226	10-100	Good	Cream colonies
Haemophilus influenzae ATCC 10211	10-100	Good	Cream colonies

LIMITATIONS OF THE PROCEDURE:

Selective media for pathogenic *Neisseria* may inhibit other pathogenic bacteria, e.g., *Haemophilus*. The existence of strains of *N. gonorrhoeae* inhibited by the components of V-C-N Inhibitor have been reported. While "saprophytic" *Neisseria* are generally suppressed by selective media, the occasional recovery of *N. lactamica* on Thayer-Martin Selective Agar has been reported. Some strains of *Capnocytophaga* species may grow on this selective medium when inoculated with oropharyngeal specimens. For identification, organisms must be in pure culture. Morphological, biochemical, and/or serological tests should be performed for final identification. Consult appropriate texts for detailed information and recommended procedures. A single medium is rarely adequate for detecting all organisms of potential significance in a specimen. It should be recognized that organisms generally susceptible to the antimicrobial agent in a selective medium may be completely or only partially inhibited depending upon the concentration of the agent, the characteristics of the microbial strain and the number of organisms in the inoculum.

STORAGE CONDITIONS AND SHELF LIFE:

Store the prepared medium at 2- 12°C. Use before expiry date on the label. Do not use beyond stated expiry date.

DISPOSAL:

Incubated prepared medium may contain active bacteria and micro-organisms. Do not open infected medium. Infected plate should be autoclaved, incinerated or opened and soaked in a chlorine-based disinfectant (liquid bleach) for 20 minutes prior to disposal.

PACKAGING:

Katalog Number: 02046

Packaging: Single wrap












Content: 10 plates/each package

REFERENCES:

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	Aseptic Sterile		Use by		Look at user manual
	Batch Code		Temperature Limitation		Manufacturer
	Catalogue Number		Do not reuse		
	Negative Controls		Contains sufficient for <n> tests		
	Positive Controls				