

GARDNERELLA V./ THAYER MARTIN

Selective media for *Gardnerella vaginalis* and pathogenic neisseriae isolation.

GARDNERELLA VAGINALIS TYPICAL FORMULA (g/ L)

Casein Peptone Plus	8.0	Proteose Peptone N°3	15.0
Soy Peptone A3	4.0	Corn Starch	1.0
Meat Peptone	8.0	Potassium Phosphate Bibasic	4.0
Corn Starch	1.0	Potassium Phosphate Monobasic	1.0
Sodium Chloride	5.0	Sodium Chloride	5.0
Sheep Defibrinated Blood	60.0 mL	Horse Defibrinated Blood	50.0 mL
Agar	15.0 mL	Vitalex Growth Supplement	10.0 mL
Gentamicin	6.0 mg	Agar	17.0
Nalidixic Acid	30.0 mg	Vancomycin	1.0 mg
Amphotericin B	2.0 mg	Colistin sulphate	3.75 mg
Final pH 7.2 ± 0.2		Amphotericin B	0.5 mg
		Trimethoprim	1.5 mg
		Final pH 7.2 ± 0.2	

DESCRIPTION

GARDNERELLA V. AGAR is a selective medium for *Gardnerella vaginalis* isolation.

THAYER MARTIN AGAR is used to isolate and cultivate *Neisseria spp.*

PRINCIPLE

Casein Peptone Plus, Soy Peptone A3, Meat Peptone, Proteose Peptone N°3 provide nitrogen, carbon, sulphur and other essential growth factors. Sodium chloride maintains the osmotic balance of the medium. Corn Starch is a source of carbon. Defibrinated blood supplies further growth factors for fastidious microorganisms and allows to enhance haemolytic reactions. Agar is the solidifying agent.

In **GARDNERELLA V. AGAR** Gentamicin inhibits many Gram-positive and Gram-negative bacteria (enterobacteria, staphylococci, *Pseudomonas*), Nalidixic Acid inhibits Gram-negative bacteria whilst Amphotericin B inhibits the development of fungi and yeasts.

In **THAYER MARTIN AGAR** potassium phosphate constitutes the buffer of the medium and Vitalex Growth Supplement supplies further nutrients for fastidious microorganisms cultivation. Vancomycin is a glycopeptide antibiotic which inhibits Gram-positive bacteria interfering with cell wall synthesis. Colistin destroys cell membrane of some Gram-negative bacteria. Amphotericin inhibits fungi and yeasts interfering with fungal membrane permeability by forming channels in the membrane and causing small molecules to leak out. The antibacterial power of Trimethoprim is due to its inhibitory effect on prokaryote dihydrofolate reductase.

TECHNIQUE

Inoculate plates streaking the sample to test on the agar surface using a sterile loop. Incubate at 36±1°C for 24-48 hours, in a 5-10% CO₂ atmosphere.

INTERPRETATION OF RESULTS

On **GARDNERELLA V. AGAR** observe for growth and for haemolytic reactions. Four different kinds of haemolysis can be distinguished:

1. alpha-haemolysis: haemoglobin is reduced to metahaemoglobin in the medium surrounding the colony and this causes a greenish decolouring of the medium;
2. beta-haemolysis: it is the lysis of erythrocytes which is evident in the bright zone around the colony;
3. gamma-haemolysis: any destruction of erythrocytes or any change in the medium does not occur;
4. alpha ' -haemolysis: a little zone of complete haemolysis surrounded by a partial lysis area is evident.

On **THAYER MARTIN AGAR** typical colonies which are oxidase positive and composed of Gram-negative diplococci can be considered to be presumptive of *Neisseria gonorrhoeae* and *Neisseria meningitidis*.

STORAGE

2-8°C away from light, until the expiry date on the label or until signs of deterioration or contamination are evident.

WARNING and PRECAUTIONS

The product is not classified as hazardous by current legislation and does not contain harmful substances in concentrations of ≥1%. The product is designed for *In vitro* diagnostic use and must be used only by properly trained operators.

DISPOSAL of WASTE

Disposal of waste must be carried out according to national and local regulations in force.

REFERENCES

- Ellner, P.D., C.J. Stoessel., E. Drakeford, and F. Vasi (1966). A new culture medium for medical bacteriology. Am. J.Clin. Path. 45, 502-504.
- Isenberg, H.D. (ed.) (1992). Clinical microbiology procedures handbook, vol. 1 American Society for Microbiology, Washington, DC.
- Chapin, C.K., G.V. Doern (1983). J. Clin. Microbiol. 17: 1163-1165.
- Martin, J.E., Armstrong J.H., Smith P.B. (1974). Appl. Microbiol. 27: 802-805.
- NCCLS document M22-A2, 1996. Quality Assurance for Commercially prepared Microbiological Culture Media-Second ed. Approved Standard.
- Seth, A. (1970). Brit. J. Vener. Dis. 46: 201-202.



Liofilchem s.r.l.

Via Scozia, Zona industriale - 64026 Roseto degli Abruzzi (Te) Italy - Tel. +39.0858930745 - Fax +39.0858930330
Web site: <http://www.liofilchem.net> - E-mail: liofilchem@liofilchem.net

PRODUCT SPECIFICATIONS

NAME
GARDNERELLA V./ THAYER MARTIN AGAR

PRESENTATION
Ready plates (90 mm) with two sectors.

STORAGE
2-8 °C

PACKAGE		
Code	Content	Packaging
18379	20 plates	<ul style="list-style-type: none"> 5 plates in thermically soldered film 4 x 5 plates in cardboard box
18379*	100 plates	<ul style="list-style-type: none"> 5 plates in thermically soldered film 2 x 5 plates in plastic bag 10 piles (2x5 plates) in cardboard box

USE
GARDNERELLA V. AGAR is a selective medium for *Gardnerella vaginalis* isolation.
THAYER MARTIN AGAR is used to isolate and cultivate *Neisseria spp.*

TECHNIQUE
Refer to technical sheet of the product.

APPEARANCE OF THE MEDIUM
GARDNERELLA V. AGAR is cherry- red, opaque media.
THAYER MARTIN AGAR is a brown medium, opaque.

SHELF LIFE
2 months








QUALITY CONTROL

- Control of general characteristics, label and print
- Sterility control
 - 7 days at 25 ± 1°C, in aerobiosis
 - 7 days at 36 ± 1°C, in aerobiosis
- Microbiological control
 - Inoculum for productivity: 10-100 UFC/ml
 - Inoculum for selectivity: 10⁴-10⁵ UFC/ml
 - Inoculum for specificity: ≤ 10⁴ UFC/ml

Incubation conditions: 36 ± 1°C for 18-24 hours, in a 5-10% CO₂ atmosphere.

Microorganisms		Growth on GARDNERELLA V.	Growth on THAYER MARTIN
<i>Escherichia coli</i>	ATCC 25922	Inhibited	-
<i>Proteus mirabilis</i>	ATCC 25933	Inhibited	-
<i>Staphylococcus aureus</i>	ATCC 25923	Inhibited	Inhibited
<i>Gardnerella vaginalis</i>	ATCC 14018	Good/ Beta haemolysis	
<i>Neisseria meningitidis</i>	ATCC 13090	-	Good

TABLE OF SYMBOLS

IVD In Vitro Diagnostic Medical Device	 Do not reuse	 Manufacturer	 Contains sufficient for <n> tests	 Temperature limitation
REF Catalogue number	 Fragile, handle with care	 Use by	 Caution, consult accompanying documents	LOT Batch code



Liofilchem s.r.l.

Via Scozia, Zona industriale - 64026 Roseto degli Abruzzi (Te) Italy - Tel. +39.0858930745 - Fax +39.0858930330
Web site: <http://www.liofilchem.net> - E-mail: liofilchem@liofilchem.net