

### **Technical Information**

### **G.Vaginalis Selective Agar Plate**

Product Code: PM 2057

Application: Recommended for qualitative isolation and differentiation of Gardnerella vaginalis from clinical specimens.

Com	position	**

Ingredients	Gms / Litre
Tryptone	12.000
Peptone	15.000
HM Peptone B#	3.000
Yeast extract	3.000
Corn starch	1.000
Sodium chloride	5.000
Agar	13.500
Final pH ( at 25°C)	7.4±0.2

<sup>\*\*</sup>Formula adjusted, standardized to suit performance parameters

## **Principle & Interpretation**

Gardnerella vaginalis is a facultatively anaerobic gram-variable rod. It has been demonstrated to cause a wide variety of infections; however, it is most commonly recognized for its role as one of the organisms responsible for bacterial vaginosis (BV). BV is the most common cause of vaginitis and the most common infection encountered in the outpatient gynaecological setting. Originally Ellner et al (1) developed a blood agar namely Columbia Agar for rapid growth of the haemolytic organisms with improved pigmentation and defined haemolytic reactions. Greenwood et al (2) further modified this medium by increasing the peptone concentration and used human blood instead of sheep blood for the isolation and differentiation of G.vaginalis based on beta haemolysis (3, 7). Vaginalis Agar Base is used for the isolation of G.vaginalis from vaginal discharges (6). Peptone, tryptone, yeast extract and meat extract B provide nitrogenous compounds, carbon, sulphur, vitamin B complex and trace ingredients required for growth. Corn starch serves as the energy source. Blood supplies additional nutrients and also aids in identification Typical colonies of G.vaginalis appear small and white coloured. This medium is recommended for determination of haemolytic reaction of G.vaginalis and not for other microorganisms. If the specimen is suspected to contain streptococci or other haemolytic microorganisms, then a Soyabean Casein Digest Agar (with 5% v/v sheep blood) plate should be inoculated parallel to this medium to ensure the haemolytic reaction.

## Type of specimen

Clinical samples - Vaginal

# **Specimen Collection and Handling**

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (4,5). After use, contaminated materials must be sterilized by autoclaving before discarding.

<sup># -</sup> Equivalent to Beef extract



## Warning and Precautions

In Vitro diagnostic Use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets

### Limitations

1. Due to nutritional variations certain strains may show poor growth.

### Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

## Methodology

Either streak, inoculate or surface spread the test inoculum (50-100 CFU) aseptically on the plate.

### **Quality Control**

#### Appearance

Sterile Vaginalis Agar in 90mm disposable plate.

#### Colour

Cherry red coloured opaque medium

#### Quantity of medium

25 ml of medium in 90 mm plate

#### Reaction

7.20-7.60

#### Sterility test

Passes release criteria

#### Cultural Response

Cultural characteristics observed in an aerobic atmosphere containing 3-10%  $CO_2$  with added 5% v/v sterile anticoagulated human blood after an incubation at 35-37°C for 48 hours.

Organism Growth Haemolysis

Gardnerella vaginalis ATCC 14018 good-luxuriant beta (diffused)

# Storage and Shelf Life

- On receipt store between 2-8°C Use before expiry date on the label.
- Product performance is best if used within stated expiry period.

# Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (4,5).



## **Further Reading**

- 1. Ellner P. D., Stoessel C. J., Drakeford E., Vasi F., 1966, Am. J. Clin. Pathol., 45: 502.
- 2. Greenwood J. R., Martin M. J., Mack E. G., 1977, Health Lab. Sci., 14: 102.
- 3. Greenwood J. R. and Pickett M. J., 1980, Int. J. Syst. Bacteriol., 30: 170.
- 4. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2<sup>nd</sup> Edition.
- 5. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
- 6. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore
- 7. Piot P., Van Dyek E., Goodfellow M., Falkow S., 1980, J. Gen. Microbiol., 119: 373.

### Disclaimer

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and developmentwork carried at **CDH** is true and accurate
- Central Drug House Pvt. Ltd. reserves the right to make changes to specifications and information related to the products at any time.
- · Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing
- of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.
- Do not use the products if it fails to meet specifications for identity and performens parameters.