## Gardnerella Selective Agar

#### Intended Use

Gardnerella Selective Agar is a medium used for qualitative isolation and differentiation of *Gardnerella vaginalis* from clinical specimens.

### Summary

*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.*, developed a blood agar namely Columbia Agar for rapid growth of the haemolytic organisms with improved pigmentation and defined haemolytic reactions. Greenwood *et al.*, 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. Gardnerella Selective Agar is used for the isolation of *G. vaginalis* from vaginal discharges.

### **Principle**

Peptic digest of animal tissue, Casein enzymic hydrolysate, yeast extract and beef extract provide nitrogenous compounds, carbon, sulphur, vitamin B complex and trace ingredients required for growth. Cornstarch serves as the energy source.

### Formula\*

Ingredients	g/L
Casein Enzymic Hydrolysate	12.0
Peptic Digest of Animal Tissue	15.0
Beef Extract	3.0
Yeast Extract	3.0
Corn Starch	1.0
Sodium Chloride	5.0
Agar	13.5
Final pH (at 25°C)	$7.4 \pm 0.2$
*Adjusted to suit performance parameters.	

### **Storage and Stability**

Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 15°C-25°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: Vaginal Specimens.

### **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 52.50 g of the powder in 950 mL purified / distilled water.
- 2. Heat to boiling to dissolve the powder completely and sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
- 3. Cool to around 50°C-55°C and aseptically add 50 mL of sterile defibrinated human blood.
- 4. Add 2 vials of Gardnerella Selective Supplement (204070410005) aseptically to this medium.
- 5. Mix well and pour into sterile petridishes.

# **Quality Control**

Dehydrated Appearance: Light yellow to yellow coloured, homogenous, free flowing powder.

Prepared Appearance: Basal Medium: Yellow coloured, clear to slightly opalescent gel.

With addition of 5% v/v sterile defibrinated human blood and supplement: Cherry red opaque gel forms in petridishes.

**Cultural Response:** Growth is observed with carbon dioxide enriched atmosphere after an incubation at 37°C for 48 to 72 hours.

### Organisms (ATCC) Gardnerella vaginalis (14018) Escherichia coli (25922) Candida albicans 3147 (10231) Proteus mirabilis (14153)

**Growth** Good Complete Inhibition Complete inhibition Partial Inhibition, no swarming

# 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. 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. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

#### **Product Presentation:**

Cat No.	Product description	Pack Size
201070400500	Dehydrated Culture Media	500 g

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.