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Violet Red Bile Lactose Agar

For the detection and colony counting of coliform bacteria from food and animal feed, water and other materials.

REF: BS.1/VL01.100.0100	100 Gram	REF: BS.1/VL01.250.0250	250 Gram
REF: BS.1/VL01.500.0500	500 Gram		

CLINICAL SIGNIFICANCE

VIOLET RED BILE AGAR WITH LACTOSE (VRBL), containing Bile and Violet Red dye, is based on MacConkey Agar (Cat. 1052) for the detection and enumeration of lactose-fermenting bacteria and the differentiation of coliforms or Coliaerogenes group from non-lactose fermenting organisms in dairy products, water and foods. Peptone provides nitrogen, vitamins, minerals and amino acids essential for growth. Yeast extract is a source of vitamins, particularly of the B-group.

METHOD PRINCIPLE

Lactose is the fermentable carbohydrate providing carbon and energy. Bile salts and Crystal violet inhibit Grampositive bacteria. Neutral red is a pH indicator. Sodium chloride supplies essential electrolytes for transport and osmotic balance. Bacteriological agar is the solidifying agent. It is convenient to use the pour plate method by placing 1 ml of the desired dilution in a sterile Petri dish, adding 15 ml of the medium, cooled to 45 – 50°C, and rotating gently before allowing to solidify.

MEDIA COMPOSITION

Item	Formula in g/L
Enzymatic Digest of Animal Tissues	7
Yeast Extract	3
Bile salts mixture	1.5
Sodium chloride	5
Lactose	10
Neutral red	0.03
Crystal violet	0.002
Agar	15

pH 7.2 ± 0.2 at 25°C

PRECAUTIONS AND WARNINGS

Media to be handled by entitled and professionally educated person. Good Laboratories practices using appropriate precautions should be followed in:

- Wearing personnel protective equipment (overall, gloves, glasses,..).
- Do not pipette by mouth.
- In case of contact with eyes or skin; rinse immediately with plenty of soap and water. In case of severe injuries; seek medical advice immediately.
- Handle specimens and inoculated culture bottles as though capable of transmitting infectious agents. All inoculated culture bottles, specimen collection needles, and blood drawing devices should be decontaminated according to country requirement for waste disposal.

  S56: dispose of this material and its container at hazardous or special waste collection point.

  S57: use appropriate container to avoid environmental contamination.

  S61: avoid release in environment.

For further information, refer to the Violet Red Bile Lactose Agar material safety data sheet.

MEDIA PREPARATION, STORAGE AND STABILITY

STORAGE AND STABILITY

BioScien. Violet Red Bile Lactose Agar should be stored between 10-30°C in a firmly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to avoid lump development due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in a dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

PROCEDURE

1. Suspend 50.0 grams in 1000 ml purified / distilled water.
2. Adjust pH to pH 7.2± 0.2 at 25°C.
3. Heat to boiling to dissolve the medium completely. Afterwards do not boil for more than 2 minutes.
4. Mix well and pour into sterile Petri plates.

Deterioration

BioScien Violet Red Bile Lactose Agar is Light beige to reddish-beige. homogeneous free flowing powder. Prepared medium is slightly opalescent, reddish-purple gel forms in Petri plates Media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration), and contaminations

SPECIMEN COLLECTION AND PRESERVATION

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (11,12). For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines (9,10,13). After use, contaminated materials must be sterilized by autoclaving before discarding.

TYPE OF SPECIMEN

Clinical samples- stool,
Food and Dairy samples

EQUIPMENT REQUIRED NOT PROVIDED

- Sterile cups
- Sterile petri-dishes
- Incubator
- Autoclave

QUALITY CONTROL

To ensure adequate quality control, it is recommended that positive and negative control included in each run. If control values are found outside the defined range, check the system performance. If control still out of range please contact the technical support.

PERFORMANCE CHARACTERISTICS

The following organisms are used by us as part of the quality assurance of the product. The total inoculum challenge for each test organism per bottle is 10 to 50 colony forming units (CFU's).

Test Organisms	Growth	Colony color
Escherichia coli ATCC® 8739	Luxuriant	purplish-red colonies with or without precipitation halo
Escherichia coli ATCC 25922	Luxuriant	purplish-red colonies with or without precipitation halo
Escherichia coli ATCC® 25922	Luxuriant	purplish-red colonies with or without precipitation halo
Enterobacter cloacae ATCC® 13047		purplish-red colonies with or without precipitation halo
Enterococcus faecalis ATCC® 19433	Inhibited	-
Enterococcus faecalis ATCC® 29212	Inhibited	-
Pseudomonas aeruginosa ATCC® 27853	Luxuriant	Colorless to beige

SYMBOLS IN PRODUCT LABELLING	
IVD For in-vitro diagnostic use	 Number of <n> test in the pack
LOT Batch Code/Lot number	 Caution
REF Catalogue Number	 Do not use if package is damaged
 Temperature Limitation	 Consult Instruction for use
 Expiration Date	
 Manufactured by	

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