Violet Red Bile Agar w Lactose, Glucose

Selective medium for detection and enumeration of enterobacteria.

TYPICAL FORMULA	(g/l)
Pancreatic Digest of Gelatin	7.0
Yeast Extract	3.0
Lactose	10.0
Glucose	10.0
Sodium Chloride	5.0
Bile Salts No. 3	1.5
Crystal Violet	0.002
Neutral Red	0.03
Agar	15.0
Final pH 7.4 ± 0.2 at 25°C	

DESCRIPTION

Violet Red Bile Agar w Lactose, Glucose is a medium used for the selective isolation and differentiation of bile-tolerant Gram-negative bacteria in food, water and other materials.

PRINCIPLE

Pancreatic digest of gelatin provides amino acids, nitrogen, carbon, vitamins and minerals for organisms growth. Yeast extract is a source of vitamins, particularly of B-group. Lactose and glucose are fermentable carbohydrates. Sodium chloride maintains the osmotic balance of the medium. Bile salts and crystal violet are selective agents effective against Gram-positive cocci. Neutral red is the pH indicator. Agar is the solidifying agent.

PREPARATION

Suspend 51.5 g of powder in 1 liter of deionized or distilled water. Bring to boil and shake until completely dissolved. Sterilize at 118°C for 15 minutes. Cool up to 45-50°C. Pour in Petri dishes.

TECHNIQUE

Use a suitable diluent such as Buffered Peptone Water (ref. 24099) to prepare the sample.

To resuscitate bacteria, a progressive enrichment is recommended in Tryptic Soy Broth (ref. 24444) for 2-5 h at 20-25°C and subsequently in EE Broth-Mossel (ref. 24096) for 24-48 h at 35 ± 2°C. Otherwise, inoculate sample dilutions directly in EE Broth-Mossel and incubate at 35 ± 2°C for 18-24 hours.

Subculture to Violet Red Bile Agar w Lactose, Glucose by pour plating or spread plating method.
Incubate aerobically at 35 ± 2°C for 18-24 hours

INTERPRETATION OF RESULTS

Select plates containing less than 150 colonies. Count characteristic pink to red colonies (with or without precipitation halo).

STORAGE AND TRANSPORT CONDITIONS

The powder is very hygroscopic, store the powder at 10-30°C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared plates at 2-8°C away from light.

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. it is nevertheless recommended to consult the safety data sheet for its correct use. The product is designed for professional use only and must be used by properly trained operators.

DISPOSAL OF WASTE

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

REFERENCES

1. EN ISO 11133:2014. Microbiology of food, animal feed and water − Preparation, production, storage and performance testing of culture media.
2. European Pharmacopoeia 6.5 (2009) 2.6.13. Microbiological examination of non-sterile products: Test for specified microorganisms.
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4. Japanese Pharmacopoeia 4.05 (2008) Microbiological examination of non-sterile products: Test for specified microorganisms.
5. ISO 21528-1:2004. Microbiology of food and animal feeing stuffs − Horizontal method for the detection and enumeration of Enterobacteriaceae − Detection and enumeration by MPN technique with pre-enrichment.
6. ISO 21528-2:2004. Microbiology of food and animal feeing stuffs − Horizontal method for the detection and enumeration of Enterobacteriaceae − Colony count method.
7. Davidson, Roth, and Gambrel-Lenarz (2004) In Wehr and Frank (ed.) Standard methods for the microbiological examination of dairy products, 17th ed. American Public Health Association, Washington, D.C.
8. Kornacki and Johnson (2001) In Downes and Ito (ed.) Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington D.C.
9. Mossel, Eelderink, Koopmans and van Rossem (1979) J. Food Protect. 42:470.
10. Mossel, Eelderink, Koopmans and van Rossem (1978) Lab Practice 27:1049.

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PRODUCT SPECIFICATIONS

NAME
Violet Red Bile Agar w Lactose, Glucose

PRESENTATION
Dehydrated medium

STORAGE
10-30°C

PACKAGING

Ref.	Content	Packaging
610336	500 g	500 g of powder in plastic bottle
620336	100 g	100 g of powder in plastic bottle

pH OF THE MEDIUM
7.4 ± 0.2

USE
Violet Red Bile Agar w Lactose, Glucose is a medium used for the selective isolation and differentiation of bile-tolerant Gram-negative bacteria in food, water and other materials

TECHNIQUE
Refer to technical sheet of the product

APPEARANCE OF THE MEDIUM
Powder medium
Appearance: free-flowing, homogeneous
Colour: beige to reddish-beige
Ready-to-use medium
Appearance: slightly opalescent
Colour: reddish-purple

SHELFLIFE
4 years

QUALITY CONTROL
1. Control of general characteristics, label and print
2. Microbiological control
   Inoculum for productivity: 50-100 CFU
   Inoculum for selectivity: 10^4-10^6 CFU
   Incubation Conditions: 18-24 h at 35 ± 2°C, in aerobiosis

Microorganism		Growth	Colony color
Escherichia coli	ATCC® 8739	Good	Pink-red
Salmonella Typhimurium	ATCC® 14028	Good	Pink-red
Pseudomonas aeruginosa	ATCC® 9027	Good	Colorless
Staphylococcus aureus	ATCC® 6538	Inhibited	---

TABLE OF SYMBOLS

LOT Batch code	Do not reuse	Manufacturer	Use by	Fragile, handle with care
REF Catalogue number	Temperature limitation	Contains sufficient for <n> tests	Caution, consult instructions for use	

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