

VL Anaerobic Blood Agar

Cat. 1485

For the cultivation of sporulating and nonsporulating anaerobic microorganisms

Practical information

| Applications | Categories |
|--------------|-------------|
| Enrichment | Clostridium |
| Enrichment | Anaerobes |

Industry: General cultivation

Principles and uses

VL Anaerobic Blood Agar is a highly nutritious medium recommended for the cultivation of sporulating and nonsporulating anaerobic microorganisms.

It contains peptone and ox extract, whose amino acids included in the medium work by reducing the pH. This reduction must be strong because the media for anaerobes must have a low potential for oxide-reduction.

Peptones also provide nitrogen, vitamins, minerals and amino acids essential for growth.

L-Cysteine and yeast extract are sources of nitrogen and carbon. The yeast extract is also a source of vitamin B. Glucose is the carbohydrate energy source. Sodium chloride supplies essential electrolytes for transport and osmotic balance. Bacteriological agar is the solidifying agent.

Formula in g/L

| | | | |
|--------------------------|-----|----------------------|------|
| Glucose | 2 | Bacteriological agar | 17,6 |
| L-Cysteine hydrochloride | 0,4 | Peptone | 10 |
| Sodium chloride | 5 | Yeast extract | 5 |
| Concentrated Ox Extract | 2 | | |

Preparation

Suspend 42 grams of the medium in 950 ml of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Sterilize in autoclave at 121 °C for 15 minutes. Cool to 45 - 50 °C and aseptically add 50 ml of sterile defibrinated blood and 1 ml of 1% Vitamin K1. Homogenize gently and pour into Petri dishes.

Instructions for use

Inoculate sample on the plate and incubate at a temperature of 35 ± 2 °C for 24-48 hours.

Quality control

| Solubility | Appearance | Color of the dehydrated medium | Color of the prepared medium | Final pH (25°C) |
|------------|-------------|--------------------------------|-------------------------------------|-----------------|
| w/o rests | Fine powder | Light toasted | Light amber. With blood: red cherry | 6,9 ± 0,2 |

Microbiological test

Incubation conditions: (35±2 °C / 24-48 h) under anaerobic conditions

| Microorganisms | Specification |
|-----------------------------------|---------------|
| Clostridium sporogenes ATCC 11437 | Good growth |

Storage

Temp. Min.:2 °C
Temp. Max.:25 °C

Bibliography

Dowell, V.R., Jr., GL. Lombard, F.S. Thompson, and A.Y. Armfield. 1981. Media for Isolation, Characterization, and Identification of Obligately Anaerobic Bacteria. U.S. Dept. of H.H.S. and CDC, Atlanta, GA.
Clinical and Laboratory Standards Institute (CLSI). 2004. Quality Control for Commercially Prepared Microbiological Culture Media; Approved Standard, 3^o ed. M22-A3. CLSI, Wayne, PA.