

Dextrose Agar

Cat. 1021

For the cultivation of a wide variety of microorganisms, with or without blood added.

Practical information

Applications	Categories
Growth	General use

Industry: General cultivation

Principles and uses

Dextrose Agar is a medium suitable to cultivate a wide variety of microorganisms, with or without blood added. The high dextrose concentration yields abundant growth in less time than other media and shortens lag period of older cultures. Although is a medium for general use, it is not appropriate for haemolyses' studies due to the high content of dextrose.

The Peptone mixture and Beef extract provide provide nitrogen, vitamins, minerals and amino acids essential for growth. Dextrose is the fermentable carbohydrate, providing carbon and energy. Sodium chloride supplies essential electrolytes for transport and osmotic balance. Bacteriological agar is the solidifying agent.

Formula in g/L

Bacteriological agar	15	Beef extract	3
Dextrose	10	Peptone mixture	10
Sodium chloride	5		

Preparation

Suspend 43 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Dispense into appropriate containers and sterilize in autoclave at 121 °C for 15 minutes.

Instructions for use

- Inoculate and incubate at 35±2 °C for 18-48 hours.
- The addition of 5% defibrinated blood allows the isolation of many fastidious bacteria, including Haemophilus and Neisseria.

Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rests	Fine powder	Beige	Amber, slightly opalescent	7,3±0,2

Microbiological test

Incubation conditions: (35±2 °C / 18-48 h).

Microrganisms	Specification
Neisseria meningitidis ATCC 13090	Good growth
Streptococcus pyogenes ATCC 19615	Good growth
Staphylococcus aureus ATCC 25923	Good growth

Storage

Temp. Min.:2 °C
Temp. Max.:25 °C

Bibliography

Recommended Methods for the Microbiological Examination of Foods APHA Inc., New York.
Compendium of Methods for the Microbiological Examinations of Food. 3rd edition APHA 1992.