

Dextrose Agar



Medium used for the cultivation of a wide variety of microorganisms with or without added blood.

• CONTENTS (Liter)

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|-------------------------------|--------|
| Pancreatic Digest of Casein | 5.0 g |
| Proteose Peptone No.3 | 2.0 g |
| Pancreatic Digest of Gelatin | 3.0 g |
| Beef Extract | 3.0 g |
| Dextrose | 10.0 g |
| Sodium Chloride | 5.0 g |
| Agar | 15.0 g |
| Final pH = 7.3 ± 0.2 at 25°C. | |

• PROCEDURE

Suspend 43.0 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45-50°C in water bath. If necessary, aseptically add 5% Sheep Blood Defibrinated (MB-S1876). Mix well. Dispense in petri dishes.

Sheep Blood Defibrinated

1 vial contents (each vial is sufficient for 500 mL of medium)
 Sheep Blood Defibrinated 50 mL

• INTERPRETATION

Dextrose Agar is a medium used for the cultivation of a wide variety of microorganisms. Pancreatic digest of casein, proteose peptone No.3, pancreatic digest of gelatin and beef extract provide nitrogen, carbon, vitamins and minerals. Dextrose is a carbon source. Sodium chloride maintains the osmotic balance. Agar is the solidifying agent.

• TECHNIC

Inoculate the plates with spreading the specimen on surface of the medium using a sterile loop. Incubate at 35 ± 2°C for 18 – 48 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: light beige.

Prepared medium

Appearance: slightly opalescent.

Color: light amber. (with blood – cherry red, opaque)

Incubation conditions: 35 ± 2°C / 18 – 48 hours

| Microorganism | ATCC | Inoculum CFU | Growth (w/o Sheep Blood) | Growth (w/ Sheep Blood) |
|---------------------------------|-------|--------------|--------------------------|-------------------------|
| <i>Escherichia coli</i> | 25922 | 50-100 | good | good |
| <i>Staphylococcus aureus</i> | 25923 | 50-100 | good | good |
| <i>Streptococcus pneumoniae</i> | 6305 | 50-100 | good | good |

• STORE

The powder is very hygroscopic. Store the powder at room temperature, 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 medium at 2-8°C.

• REFERENCES

1. Vanderzant, C., and D.F. Splittstoesser (1992). Compendium of methods for microbiological examination, 3rd ed.
2. MacFadding (1985). Media for isolation-cultivation-identification-maintenance of medical bacteria, vol. 1, p. 802-804.

• PACKAGE

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| Cat. No : MB-D1002 Dextrose Agar | 500 G |
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