

CLOSTRIDIUM AGAR BASE

Basal medium for *Clostridium difficile* isolation.

TYPICAL FORMULA (g/L)

| | |
|--------------------------|------|
| Meat Peptone | 20.0 |
| Casein Peptone | 20.0 |
| Monopotassium Phosphate | 1.0 |
| Sodium Phosphate Bibasic | 5.0 |
| Sodium Chloride | 2.0 |
| Magnesium Sulphate | 0.1 |
| Fructose | 6.0 |
| Agar | 15.0 |
| Final pH 7.4 ± 0.2 | |

DESCRIPTION

CLOSTRIDIUM AGAR BASE is a basal medium for *Clostridium difficile* isolation.

PRINCIPLE

Meat Peptone and Casein Peptone provide the carbon and nitrogen sources required for good growth of a wide variety of organisms. Fructose is an energy source. Monopotassium phosphate and sodium phosphate provide buffering capability. Magnesium sulfate provides necessary trace elements. Sodium Chloride maintains the osmotic balance of the medium. Agar is the solidifying agent.

The addition of blood provides further growth factors for fastidious microorganisms. The addition of D- Cycloserine and Cefoxitin allows the inhibition of a large variety of microorganisms included enterobacteria, faecal enterococci, anaerobic non-spore forming gram-negative bacilli and clostridi, except *C. difficile*.

PREPARATION

Melt the content of one bottle in a boiling water-bath at 100°C (loosing the caps partially unscrewed) until completely dissolved. Cool to 45-50°C and aseptically add 10 mL of SHEEP BLOOD DEFIBRINATED (ref. 83296), 50 mg of D- Cycloserine (equivalent to 250 mg/ L of medium) and 1.6 mg of Cefoxitin (equivalent to 8 mg/ L of medium). Mix well avoiding the formation of bubbles and distribute into Petri dishes. Allow the medium to solidify. Store the plates in tightly closed containers.

TECHNIQUE

Direct faces inoculation

Lightly inoculate the medium with the faecal sample by spreading part of the initial suspension in order to obtain isolated colonies and incubate at 36+/-1°C for 24-48 hours in anaerobic atmosphere.

Alcohol shock treatment

Mix equal parts of absolute or 95% ethylic alcohol and the faecal suspension. Homogenise using a vortex mixer. Leave at room temperature for 1 hour. Inoculate onto Clostridium Difficile Agar and incubate at 36+/-1°C 24-48 hours anaerobically.

INTERPRETATION OF RESULTS

C. difficile grows after 48 hours of incubation at 37°C in anaerobic conditions, with 4-6 mm diameter, irregular, raised, opaque, grey-white colonies.

STORAGE

10-25°C away from light, until the expiry date on the label or until signs of deterioration or contamination are evident.

WARNING and PRECAUTIONS

The product is not classified as hazardous by current legislation and does not contain harmful substances in concentrations of ≥1%. The product is designed for *In vitro* diagnostic use and must be used only by properly trained operators.

DISPOSAL of WASTE

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

REFERENCES

1. Levett (1985) J. Clin. Pathol. 38: 233-234.
2. Barlett, J.G. et al. (1978) N. Eng. J. Med., **298**, 531.
3. Boriello, S.P. et al (1981) J. Antimicrob. Chemother. 7 Supp. A. 53-62.
4. George, R.H. et al (1976) J. Clin. Microbiol. **6**, 214-219.



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PRODUCTS SPECIFICATIONS

NAME
CLOSTRIDIUM AGAR BASE

PRESENTATION
Glass bottles containing 200 ml of medium.

STORAGE
10-25°C

PACKAGING

| Code | Content | Packaging |
|--------|--------------------|----------------------------|
| 413040 | 6 bottles x 200 ml | 6 bottles in cardboard box |

pH OF THE MEDIUM
7.4 ± 0.2

USE
CLOSTRIDIUM AGAR BASE is a basal medium for *Clostridium difficile* isolation.

TECHNIQUE
Refer to technical sheet of the product.

APPEARANCE of the MEDIUM
Light amber medium.

SHELF LIFE
2 years

- QUALITY CONTROL**
- Control of general characteristics, label and print
 - Sterility control
7 days at 25 ± 1°C, in aerobiosis
7 days at 36 ± 1°C, in aerobiosis
 - Microbiological control
Inoculum for productivity: 10-100 UFC/ml
Inoculum for specificity: ≤ 10⁴ UFC/ml
Inoculum for selectivity: 10⁴-10⁵ UFC/ml
Incubation conditions: at 25-30 °C for up to 7 day.

| Microorganism | | Growth |
|------------------------------|------------|-----------|
| <i>Escherichia coli</i> | ATCC 25922 | Inhibited |
| <i>Clostridium difficile</i> | ATCC 11204 | Good |

TABLE OF SYMBOLS

| | | | |
|---|------------------------|--------------|---|
| IVD In vitro Diagnostic Medical Device | LOT Batch code | Manufacturer | Contains sufficient for <n> tests |
| REF Catalogue number | Temperature limitation | Use by | Caution, consult accompanying documents |



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