

DESOXYCHOLATE AGAR

Selective medium for enterobacteria isolation and enumeration from clinical specimens, milk and dairy products.

| TYPICAL FORMULA | (g/l) |
|-----------------------------|-------|
| Peptone | 10.0 |
| Lactose | 10.0 |
| Sodium Desoxycholate | 1.0 |
| Sodium Chloride | 5.0 |
| Ferric Citrate | 1.0 |
| Sodium Citrate | 1.0 |
| Neutral Red | 0.03 |
| Potassium Phosphate bibasic | 2.0 |
| Agar | 15.0 |

Final pH = 7.1 ± 0.2 at 25 °C.

DIRECTIONS

Suspend 45.0 g of powder in 1 liter of distilled or deionized water. Heat to boiling. Cool to 45-50 °C . Dispense in petri dishes. Do not sterilize and avoid overheating.

DESCRIPTION

DESOXYCHOLATE AGAR is a selective medium for the isolation of enterobacteria from clinical specimens, milk and dairy products. The medium can be used for the enumeration of coliforms in milk and dairy products and for the differentiation of the lactose fermenting bacteria from the non fermenting. The coliforms grow as pink-red colonies, whereas non lactose fermenting microorganisms (*Salmonella and Shigella*) are colorless. Sodium citrate and sodium desoxycholate inhibit the growth of the Gram-positive bacteria.

TECHNIQUE

Pipette 1-4 ml of the sample (or of its tenfold dilutions) into a Petri dish. Add 10-20 ml of molten freshly prepared medium, cooled to 45-50 °C. Mix gently, allow to solidify with the caps partially removed and incubate at 36 ± 1 °C for 18-24 hours. Count all dark red colonies. Non-lactose fermenters of enteric origin form colorless colonies, while non-lactose fermenters of non-enteric origin are inhibited by desoxycholate.

QUALITY CONTROL

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: pinkish beige.

Prepared medium

Appearance: slightly opalescent.

Color: orange.

Incubation conditions: 36 ± 1 °C for 18-24 hours.

| Microorganism | ATCC | Growth | Characteristics |
|-------------------------------|-------|----------------------------------|------------------------------------|
| <i>Enterococcus faecalis</i> | 29212 | markedly to completely inhibited | |
| <i>Escherichia coli</i> | 25922 | good | pink colonies w / bile precipitate |
| <i>Salmonella typhimurium</i> | 14028 | good | colorless colonies |

STORAGE

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.

REFERENCES

1. Leifson, E. (1935). J. Pathol. Bacteriol. **40**; 581-599
2. APHA (1967). Standard methods for the examination of dairy products. 12th Ed. Pp. 58-59.



LIOFILCHEM s.r.l.

Via Scozia, Zona Ind.le - 64026, Roseto D.A. (TE) - ITALY

Phone +390858930745 Fax +390858930330







Website: www.liofilchem.net E-mail: liofilchem@liofilchem.net



PRESENTATION

| Product | REF | Σ |
|------------------------------|---------|----------|
| DESOXYCHOLATE AGAR (11.1 l) | 610014 | 500 g |
| DESOXYCHOLATE AGAR (2.2 l) | 620014 | 100 g |
| DESOXYCHOLATE AGAR (111.1 l) | 6100145 | 5 Kg |

TABLE OF SYMBOLS

| | | | | |
|-----------------------------|---|--|--|--|
| LOT Batch code |  Caution, consult accompanying documents |  Manufacturer | Σ Contains sufficient for <n> tests | IVD <i>In Vitro</i> Diagnostic Medical Device |
| REF Catalogue number |  Fragile, handle with care |  Use by |  Temperature limitation |  Keep away from heat source |



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