

## Legionella BCYE Agar w Vancomycin + Colistin

Selective medium for detection of *Legionella* spp.

| TYPICAL FORMULA      | (g/l) |  |
|----------------------|-------|--|
| Yeast Extract        | 10.0  |  |
| Activated Charcoal   | 2.0   |  |
| ACES Buffer          | 10.0  |  |
| Potassium Hydroxide  | 2.8   |  |
| α-Ketoglutarate      | 1.0   |  |
| L-Cystine            | 0.4   |  |
| Ferric Pyrophosphate | 0.25  |  |
| Vancomycin           | 0.002 |  |
| Colistin             | 0.015 |  |
| Agar                 | 12.0  |  |
| Final pH 6.8 ± 0.2   |       |  |

#### DESCRIPTION

Legionella BCYE Agar w Vancomycin + Colistin is a selective medium used for the isolation of *Legionella* species from clinical specimens.

#### PRINCIPLE

Yeast extract provides amino acids, nitrogen, carbon, vitamins and minerals. Activated charcoal decomposes hydrogen peroxide, a metabolic product toxic to *Legionella* spp, and may also collect carbon dioxide and modify surface tension. ACES buffer (N-2-acetamido-2-aminoethane sulfonic acid) and potassium hydroxide maintain the proper pH for optimal growth. Alpha-ketoglutarate, cysteine and ferric pirophosphate are incorporated to satisfy the specific nutritional requirements of *Legionella* species. Vancomycin inhibits Gram-positive organisms and collistin inhibits is effective against sensitive Gram-negative bacteria, such as Enterobacteriaceae, except *Proteus* spp. Agar is the solidifying agent.

#### TECHNIQUE

Culture specimens from swab by rolling the swab over the agar surface to obtain isolated colonies. Incubate plates at  $35 \pm 2^{\circ}$ C for at least 2 days in humidified atmosphere (air with 2.5% CO<sub>2</sub> can be beneficial for the growth of some Legionella but is not essential).

#### INTERPRETATION OF RESULTS

Colonies of Legionella are often white-grey-blue-purple in colour, but can be brown, pink, lime-green or deep-red. They are smooth with an entire edge and exhibit a characteristic ground-glass appearance.

## STORAGE AND TRANSPORT CONDITIONS

2-8°C away from light, until the expiry date on the label. However, our stability studies have shown that the transport at 18-25°C for 4 days, or at 35-39°C for 48 hours, does not alter in any way the performance of the product. Eliminate if signs of deterioration or contamination are evident.

## WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. 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 the national and local regulations in force.

## REFERENCES

- 1. Edelstein P.H. (1981) Improved semiselective medium for the isolation of *Legionella pneumoniae* from contaminated clinical and environmental specimens. J. Clin. Microbiol. 14(3):298.
- 2. MacFaddin, J. D. 1985. Media for isolation-cultivation-identification- maintenance of medical bacteria, vol. 1, p. 275-284. Williams & Wilkins, Baltimore, MD.
- MacFaddin, J. D. (1985) Media for isolation-cultivation-identification-maintenance of medical bacteria, vol. 1, p. 275-284. Williams & Wilkins, Baltimore, MD.
- 4. Clesceri L.S., A.E. Greenberg and A.D. Eaton (1998) Standard methods for the examination of water and wastewater, 20th ed. American Public Health Association (APHA), Washington, D.C.



LIOFILCHEM<sup>®</sup> S.r.I.





# PRODUCT SPECIFICATIONS

## NAME

Legionella BCYE Agar w Vancomycin + Colistin

## PRESENTATION

Ready to use plates (90 mm) containing 22±1 ml of medium

## STORAGE

2-8°C

## PACKAGING

| Ref.  | Content   | Packaging  |  |  |  |
|-------|-----------|--|--|--|--|
| 10424 | 20 plates | <ul> <li>10 plates in thermally soldered film</li> <li>2 x 10 plates in cardboard box</li> </ul> |  |  |  |

## pH OF THE MEDIUM

6.8 ± 0.2

## USE

Legionella BCYE Agar w Vancomycin + Colistin is a selective medium used for the isolation of *Legionella* species from clinical specimens

#### TECHNIQUE

Refer to technical sheet of the product

#### APPEARANCE OF THE MEDIUM

Black, opaque

SHELFLIFE

6 months

## QUALITY CONTROL

- 1. Control of general characteristics, label and print
- Sterility control 7 days at 22 ± 1°C, in aerobiosis 7 days at 36 ± 1°C, in aerobiosis
- Microbiological control Inoculum for productivity: 50-100 CFU Inoculum for selectivity: 10<sup>4</sup>-10<sup>6</sup> CFU Incubation Conditions: 2-5 days at 35 ± 2°C

### Microorganism

| Legionella pneumophila | ATCC® 33152 |
|------------------------|-------------|
| Legionella bozemanii   | NCTC 11368  |
| Staphylococcus aureus  | ATCC® 25923 |
| Escherichia coli       | ATCC® 25922 |

## TABLE OF SYMBOLS

| LOT Batch code              | IVD | <i>In vitro</i> Diagnostic<br>Medical Device | ***                | Manufacturer                             | $\Box$ | Use by                                   |           | Fragile, handle with care |
|-----------------------------|-----|--|--------------------|--|--------|--|-----------|---------------------------|
| <b>REF</b> Catalogue number | ľ   | Temperature<br>limitation                    | $\bigvee_{\Sigma}$ | Contains sufficient<br>for <n> tests</n> |        | Caution, consult<br>instructions for use | $\otimes$ | Do not reuse              |

Growth

Good

Good

Partially to completely inhibited

Partially to completely inhibited



