

## E.M.B. LEVINE AGAR W LACTOSE + SUCROSE

Selective medium for gram-negative enteric bacteria isolation.

### TYPICAL FORMULA (g/l)

Peptone	10.0
Lactose	5.0
Sucrose	5.0
Potassium phosphate bibasic	2.0
Eosine Y	0.4
Methylene blue	0.066
Agar	15.0
pH = 7,1 ± 0,2	

### DESCRIPTION

**E.M.B. LEVINE AGAR W LACTOSE + SUCROSE** is a selective medium for isolation of enteric gram negative bacteria.

### PRINCIPLE

The eosin dye inhibits growth of gram-positive bacteria and combines with the methylene blue indicator to produce a color change whenever lactose or sucrose are fermented. This medium does not allow discrimination between which carbohydrate is fermented. *Yersinia enterocolitica*, which ferments sucrose, but not lactose, will produce the same purple-black colony as lactose-fermenting bacteria.

### PREPARATION

Suspend 38 g of powder in 1 litre of sterile distilled or deionized water. Heat until completely dissolved. Sterilize in autoclave at 121°C for 15 minutes. Dispense into petri dishes and allow to solidify.

### TECHNIQUE

Inoculate the faecal sample or rectal swab onto a small area of a plate and streak for isolation. Incubate at 36±1°C for 18-24 hours and examine colonies with morphology associate to potential pathogens.

### INTERPRETATION of RESULTS

*Escherichia coli* : Blue-black, dark centered colony with green, metallic sheen.

*Salmonella* species: Colorless or transparent, light-purple colonies.

*Klebsiella* species: Mucoid brownish colony with blue-black center.

*Proteus* species: Smooth, translucent, colorless colonies.

For the definitive identification of *Enterobacteriaceae*, additional biochemical test must be performed.

### STORAGE

10-30°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. It is nevertheless recommended that the Safety Data Sheet be consulted on 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 national and local regulations in force.

### REFERENCES

- Levine, M.M., (1918). Differentiation of *E. coli* and *B. aerogenes* on a simplified Eosin-Methylene Blue Agar. J. Infect. Dis. **23**:43.
- Holt-Harris, J.E., and O. Teague. (1916). A new culture medium for isolation of *Backillus typhosa* from stools. J. Infect. Dis. **18**: 596-600.



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## PRODUCT SPECIFICATIONS

### NAME

**E.M.B. LEVINE AGAR W LACTOSE + SUCROSE**

### PRESENTATION

Dehydrated medium.

### STORAGE

10-30°C

### PACKAGING

Code	Content	Packaging
610140	500 g	500 g of powder in plastic bottle
620140	100 g	100 g of powder in plastic bottle

### pH OF THE MEDIUM

7,1 +/- 0,2

### USE

**E.M.B. LEVINE AGAR W LACTOSE + SUCROSE** is a selective medium for isolation of enteric gram negative bacteria.

### TECHNIQUE

Refer to technical sheet of the product.

### APPEARANCE of the MEDIUM

Homogeneous, reddish-pink dehydrated medium.  
Slightly opalescent, wine-red prepared medium.

### SHELF LIFE

4 years.

### QUALITY CONTROL

- Control of general characteristics, label and print
- Microbiological control  
Inoculum for productivity: 10-100 UFC/ml  
Inoculum for specificity:  $\leq 10^4$  UFC/ml  
Incubation conditions: 18-24 h at  $36 \pm 1^\circ\text{C}$

Microorganism	ATCC	Growth	Characteristics
<i>Enterococcus faecalis</i>	19433	Partial inhibition	Colorless colonies
<i>Escherichia coli</i>	25922	Good	Blue /black colonies with black centres and metallic sheen
<i>Salmonella typhimurium</i>	14028	Good	Colorless colonies

### TABLE OF SYMBOLS

<b>IVD</b> In Vitro Diagnostic Medical Device	 Do not reuse	 Manufacturer	 Contains sufficient for <n> tests	 Temperature limitation
<b>REF</b> Catalogue number	 Fragile, handle with care	 Use by	 Caution, consult accompanying documents	<b>LOT</b> Batch code



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