



## E.M.B. LEVINE AGAR

Selective medium for isolation of enteric Gram Negative bacteria

### TYPICAL FORMULA (g/l)

Peptone.....	10.0
Lactose.....	10.0
Potassium phosphate.....	2.0
Eosine Y.....	0.4
Methylene blue .....	0.065
Agar.....	14.0

pH = 7,1 ± 0,2

### DESCRIPTION

**E.M.B. LEVINE AGAR** is a selective medium for isolation of enteric Gram Negative bacteria.

### PRINCIPLE

Eosin and methylene blue, contained in the medium, inhibit the growth of Gram positive bacteria. The good correlation between the two dyes permits to discriminate between *Enterobacteriaceae* lactose fermenting and non fermenting on the basis of microorganism ability to adsorb dye.

### 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

The coliforms, lactose-fermenting microorganisms, cultivate with blue/black colonies with a black centre and a metallic sheen; other coliforms, as *Enterobacter*, cultivate with pink and mucoid colonies. *Salmonella* and *Shigella*, non lactose fermenting, appear colorless, transparent or amber colour. Strains as *Enterococcus faecalis* are partly inhibited and appear as colorless 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. 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 *Bacillus typhosa* from stools. *J. Infect. Dis.* **18**: 596-600.



**Liofilchem s.r.l** Bacteriology Products

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## PRODUCT SPECIFICATIONS

### NAME

E.M.B. LEVINE AGAR

### PRESENTATION

Ready plates (90 mm) containing 20+/-1 ml of medium.

### STORAGE

10-25°C

### PACKAGING

Code	Content	Packaging
10048	20 plates	<ul style="list-style-type: none"><li>• 5 plates in thermically soldered film</li><li>• 4 x 5 plates in cardboard boxes</li></ul>
10048*	100 plates	<ul style="list-style-type: none"><li>• 5 plates in thermically soldered film</li><li>• 2 x 5 plates in thermically soldered bag</li><li>• 10 piles (2 x 5 ps) in box</li></ul>

### pH OF THE MEDIUM

7,1 +/- 0,2

### USE

**E.M.B. LEVINE AGAR** is a selective medium for isolation of enteric Gram Negative bacteria.

### TECHNIQUE

Refer to technical sheet of the product.

### APPEARANCE of the MEDIUM

Purple Medium, slightly opalescent with precipitate orange-greenish colour..

### SHELF LIFE











6 months.

### QUALITY CONTROL

1. Control of general characteristics, label and print
2. Sterility control  
7 days at 25 ± 1°C, in aerobiosis  
7 days at 36 ± 1°C, in aerobiosis
3. Microbiological control  
Inoculum for productivity: 10-100 UFC/ml  
Inoculum for selectivity: 10<sup>4</sup>-10<sup>5</sup> UFC/ml  
Inoculum for specificity: ≤ 10<sup>4</sup> UFC/ml  
Incubation conditions: 18-24 h at 36 ± 1°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

Symbol	Meanings
	In vitro Diagnostic Medical Device
	Manufacturer
	Catalogue number
	Use by
	Temperature limitation
	Do not reuse
	Contains sufficient for <n> tests
	Consult accompanying documents
	Batch code
	Fragile, handle with care



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