

m-FC AGAR + ROSOLIC ACID

Selective medium for coliforms isolation and enumeration.

TYPICAL FORMULA (g/L)

| | |
|-----------------------|-----------|
| Tryptose..... | 10.0 |
| Proteose Peptone..... | 5.0 |
| Lactose..... | 12.5 |
| Bile Salts n°3..... | 1.5 |
| Sodium Chloride..... | 5.0 |
| Yeast Extract..... | 3.0 |
| Aniline Blue..... | 0.1 |
| Agar..... | 15.0 |
| Rosolic Acid..... | 0.1 |
| Final pH | 7.4 ± 0.2 |

DESCRIPTION

m-FC AGAR + ROSOLIC ACID is a selective medium used for the isolation and enumeration of faecal coliforms by the membrane filter technique.

PRINCIPLE

m-FC AGAR + ROSOLIC ACID contains tryptose and proteose peptone as sources of nitrogen, carbon, vitamins and minerals. Yeast extract supplies B-complex vitamins that stimulate bacterial growth. Bile Salts inhibit the growth of Gram-positive bacteria. Lactose fermentation makes pH of the medium decrease with consequent precipitation of bile salts and turning to blue of the staining. Agar is the solidifying agent.

PREPARATION

Melt the content of one bottle in a boiling water-bath at 100°C (loosing the caps partially unscrewed) until completely dissolved. Aseptically distribute into Petri dishes. Allow the medium to solidify. Store the plates in tightly closed containers.

TECHNIQUE

Membrane Filtration Method

- Filter samples through a sterile membrane to give 20-200 colonies on the membrane surface.
- Transfer the membrane on the agar surface, invert the plates and incubate at 36+/-1°C for 48 hours.
- Count all the colonies, if it is the case with the aid of a low power (10 to 15 magnifications) binocular wide field dissecting microscope.
- Calculate the number of faecal coliforms and report as faecal coliforms per 100 ml.

INTERPRETATION of RESULTS

Faecal coliforms cultivate with blue colonies and all other Gram-negative bacteria cultivate with gray or cream colonies.

STORAGE

15-25°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 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. APHA (1985). *Standard Methods of the Examination of Water and Wastewater*, 16th Edition.
2. Gildreich, E.E., H.F. Clark, C.B. Huff, and L.C. Best (1965). *J. Am. Waters Works Ass.* 57, 208.



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PRODUCT SPECIFICATIONS

NAME

m-FC AGAR + ROSOLIC ACID.

PRESENTATION

Code 403020

Glass bottles containing 100 ml of medium.

STORAGE

10-25°C

PACKAGE

| Code | Content | Packaging |
|--------|--------------------|------------------|
| 403020 | 6 bottles x 100 ml | 6 bottles in box |

pH OF THE MEDIUM

7.4 ± 0.2

USE

m-FC AGAR + ROSOLIC ACID is a selective medium used for the isolation and enumeration of faecal coliforms by the membrane filter technique.

TECHNIQUE

Refer to technical sheet of the product.

APPEARANCE OF THE MEDIUM

Cranberry red medium, may have slight precipitates.

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 selectivity: 10⁴-10⁵ UFC/ml
 Inoculum for specificity: ≤ 10⁴ UFC/ml
 Incubation conditions: 24 +/- 2 h at 44.5 +/- 0.5°C, in aerobiosis

| Microorganisms | | Growth | Color of colonies |
|------------------------------|------------|-----------|-------------------|
| <i>Escherichia coli</i> | ATCC 25922 | Good | Blu |
| <i>Klebsiella pneumoniae</i> | ATCC 13883 | Good | Gray |
| <i>Enterococcus faecalis</i> | ATCC 19433 | Inhibited | |

TABLE OF SYMBOLS

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

