

m-FC BROTH BASE

Selective basal medium for fecal coliforms isolation and enumeration from water by the membrane filter technique.

TYPICAL FORMULA (g/l)

Tryptose	10.0
Proteose Peptone no.3	5.0
Yeast Extract	3.0
Lactose	12.5
Sodium Chloride	5.0
Bile Salt no.3	1.5
Aniline Blue	0.1
Final pH = 7.4 ± 0.2 at 25 °C.	

DIRECTIONS

Suspend 37.1 g of powder in 1 liter of distilled or deionized water.

Add 2 vials di Rosolic Acid supplement (Rosolic acid 50 mg/vial, code 81029), reconstituting each vial with 5 ml of sterile distilled water.

Heat until completely dissolved. Bring to boiling while gently shaking. Do not sterilize.

Cool to 45-50 °C and saturate sterile absorbent pads (55 mm diameter) with 2 ml of medium.

DESCRIPTION

m-FC BROTH BASE is a selective medium used for the isolation and enumeration of fecal coliforms from water by the membrane filter technique at elevate temperatures.

TECHNIQUE

Filter duplicate samples through separate membrane filters.

Transfer the filters to the surface of separate mFC Broth pads.

Place each plate in a separate waterproof plastic bag,

submerge in different water baths and incubate one at 44.5 ± 0.5 °C and one at 36 ± 1 °C for 24 ± 2 hours.

Colonies of fecal coliforms will be various shades of blue, non-fecal coliforms are gray to cream colored.

QUALITY CONTROL

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: beige with slight blue tint.

Prepared medium

Appearance: slightly opalescent.

Color: cranberry red, may have a very fine precipitate.

Incubation conditions: 44.5 ± 0.5 °C for 24 ± 2 hours.

Microorganism	ATCC	Growth	Colors
<i>Enterococcus faecalis</i>	19433	markedly to completely inhibited	
<i>Escherichia coli</i>	25922	good	blue
<i>Klebsiella pneumoniae</i>	13883	good	gray

PERFORMANCE AND LIMITATIONS

A few non-fecal coliform colonies may be observed, due to the selective action of the elevate temperature and the addition of the Rosolic Acid.

It may be useful to elevate the temperature to 45 ± 2 °C to eliminate *Klebsiella* strains from the fecal coliform group.

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.

Store prepared tubes at 2-8 °C.



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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.

PRESENTATION









Product	REF	
m-FC BROTH BASE (13.4 l)	610162	500 g
m-FC BROTH BASE (2.6 l)	620162	100 g
ROSOLIC supplement	81029	10 vials

TABLE OF SYMBOLS

LOT Batch code	 Caution, consult accompanying documents	 Manufacturer	 Contains sufficient for <n> tests	 Keep away from heat source
REF Catalogue number	 Fragile, handle with care	 Use by	 Temperature limitation	



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