m-FC AGAR 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 n°3	1.5
Aniline Blue	0.1
Agar	15.0

Final pH = 7.4 ± 0.2 at 25 °C.

DIRECTIONS

Suspend 52.1 g of powder in 1 liter of distilled or deionized water. Add 2 vials of Rosolic Acid supplement (Rosolic acid 50 mg/vial, code 81029). Heat until completely dissolved. Bring to boil. Do not sterilize. Cool to 45-50 °C . Dispense into petri dishes.

DESCRIPTION

m-FC AGAR BASE is a selective medium used for the isolation and enumeration of fecal coliforms from water by the membrane filter technique at elevate temperatures. Fecal coliforms cultivate with blue colonies and all other Gram-negative bacteria cultivate with grey or cream colonies. Biliary salts inhibit the growth of Gram-positive bacteria.

TECHNIQUE

Filter duplicate samples through separate membrane filters. Transfer the filters to the surface of separate mFC Agar Base plates. Place each plate in a separate waterproof plastic bag, submerge in different waterbaths 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
Enterococcus faecalis	19433	markedly to completely inhibited	
Escherichia coli	25922	good	blue
Klebsiella pneumoniae	13883	good	gray

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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 plates at 2-8 °C.

REFERENCES

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

PRESENTATION

Product	REF	Σ
m-FC AGAR BASE (9.5 l)	611012	500 g
m-FC AGAR BASE (1.9 l)	621012	100 g
m-FC AGAR BASE (95.9 l)	6110125	5 Kg
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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