07012 M-FC Agar modified for Klebsiella, Vegitone (Vegitone M-FC Agar modified for Klebsiella; m-Fecal Coliform Agar modified for Klebsiella, Vegitone)

This M-FC Agar is used for rapid enumeration of *Klebsiella* using membrane filter technique. It is free of animal derived material.

Composition:

Ingredients	Grams/Litre
Tryptose (vegetable)	10.0
Proteose Peptone (vegetable)	5.0
Yeast extract	3.0
Sodium chloride	5.0
Inositol	10.0
Synthetic detergent	1.5
Aniline blue	0.1
Agar	15.0
Final pH 7.4 +/- 0.2 (at 25°C)	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Appearance: Yellow coloured, homogeneous, free flowing powder.
Gelling: Firm.
Colour and Clarity: With addition of rosolic acid, red coloured slightly opalescent gel forms in petri plates.

Directions:
Suspend 49.6 g in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE. Add 10 ml of a 1 % solution of rosolic acid (Aldrich 861324) in 0.2 N NaOH. Cool below 45°C and add 50 mg carbenicillin (Sigma C3416). Mix well and pour into sterile petri plates.

Principle and Interpretation:
M-FC Agar, Modified is formulated as per APHA (1) for enumeration of *Klebsiella*. M-FC Agar is modified by replacing lactose by inositol and adding Carbenicillin.
Sample volume is selected to yield 20 to 60 *Klebsiella* colonies per membrane. The membrane filter is placed on agar surface. Occasional false positive occurences are caused by *Enterobacter* species. *Klebsiella* colonies appear deep blue to blue grey due to aniline blue present in the medium. Tryptose (vegetable), Proteose Peptone (vegetable) and yeast extract provides nitrogenous compounds, sulphur, vitamins and other nutrients. Inositol is the fermentable carbohydrate. Synthetic detergent inhibits gram-positive organisms and replace the original used bile salt.

Cultural characteristics after 24 hours at 35-37°C.

Organisms (ATCC)	Growth	Colour of Colony
Klebsiella pneumoniae (13883)	+++	deep blue to blue grey
Enterobacter aerogenes (13048)	+++	pink or occasionally pale yellow

References:

1. A.E. Greenberg, R.R. Trussell, L.S. Clesceri L.S. (Eds.), Standard Methods For the Examination of Water and Waste Water, 16th ed., APHA, Washington, D.C. (1985)

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.