

M-FC HiVeg™ Agar Base, Modified**MV1124**

M-FC HiVeg Agar Base, Modified is used for rapid enumeration of *Klebsiella* using membrane filter technique.

Composition ** :

Ingredients	Grams/Litre
HiVeg hydrolysate No. 1	10.0
HiVeg peptone No. 3	5.0
Yeast extract	3.0
Sodium chloride	5.0
Inositol	10.0
Synthetic detergent No. 1	1.5
Aniline blue	0.1
Agar	15.0

Final pH (at 25°C) 7.4 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 49.6 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE. Add 10 ml of 1% Rosolic Acid (FD058). Cool below 45°C and add 50 mg Carbenicillin. Mix well and pour into sterile petri plates.

Principle and Interpretation :

This medium is prepared by using vegetable peptones that are free of BSE/TSE risks associated with animal based peptones. M-FC Agar Base, Modified is formulated as per APHA (1) for enumeration of *Klebsiella*. In this medium M-FC Agar is modified by replacing lactose with inositol and addition of Carbenicillin. M-FC HiVeg Agar Base, Modified is the modification of M-FC Agar Base Modified. Sample volume is selected to yield 20 to 60 *Klebsiella* colonies per membrane. This membrane filter is placed on agar surface. Occasional false positive occurrences are caused by *Enterobacter* species. *Klebsiella* colonies appear deep blue to blue grey due to the aniline blue present in the medium. HiVeg hydrolysate No.1, HiVeg peptone No.3, yeast extract provides nitrogenous compounds, sulphur, vitamins and other nutrients. Inositol is the fermentable carbohydrate. Synthetic detergent No. 1 inhibits gram-positive organisms. Carbenicillin acts as an inhibitory substance.

Quality Control :**Appearance of powder**

Yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.

Product Profile :

Vegetable based (Code MV) ©	Animal based (Code M)
MV1124 HiVeg hydrolysate No. 1 HiVeg peptone No. 3 Synthetic detergent No. 1	M1124 Tryptose Proteose peptone Bile salts mixture

Recommended for : Rapid enumeration of *Klebsiella* using membrane filter technique

Reconstitution : 49.6 g/l

Quantity on preparation (500g): 10.08 L

pH (25°C) : 7.4 ± 0.2

Supplement : Rosolic Acid (FD058),
Carbenicillin

Sterilization : Boiling (DO NOT AUTOCLAVE).

Storage : Dry Medium - Below 30°C, Use freshly prepared medium.

Gelling

Firm, comparable with 1.5% Agar gel.

Colour and Clarity

With addition of 1% Rosolic Acid (FD058), red coloured slightly opalescent gel forms in petri plates.

Reaction

Reaction of 4.96% w/v aqueous solution is pH 7.4 ± 0.2 at 25°C.

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 24 hours with added Rosolic Acid (FD058) and Carbenicillin.

Organisms (ATCC)	Inoculum (CFU)	Growth	Colour of colony*
<i>Enterobacter aerogenes</i> (13048)	20-60	good-luxuriant	pink or pale yellow
<i>Klebsiella pneumoniae</i> (13883)	20-60	good-luxuriant	deep blue-blue grey

Key : * = on membrane filter

References :

- Greenberg A. E., Trussell L. S. (ed.) , 1985, Standard methods R. R. and Clesceri for the examination of water and waste water, 16th ed., APHA, Washington, D.C.