

Rippey-Cabelli HiVeg™ Agar Base**MV859**

Rippey-Cabelli HiVeg Agar Base is recommended for differential and selective cultivation of *Aeromonas hydrophila* from water samples using membrane filter technique.

Composition ** :

Ingredients	Grams/Litre
HiVeg hydrolysate No. 1	5.0
Trehalose	5.0
Yeast extract	2.0
Sodium chloride	3.0
Potassium chloride	2.0
Magnesium sulphate	0.2
Iron (III) Chloride	0.1
Bromo thymol blue	0.04
Agar	15.0

Final pH (at 25°C) 8.0 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 16.17 grams in 500 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 50°C and aseptically add 10 ml ethanol and rehydrated contents of 1 vial of Rippey-Cabelli Supplement (FD107). Mix well before pouring into sterile petriplates.

Principle and Interpretation :

This medium is prepared by replacing Tryptose with HiVeg hydrolysate No 1 which makes the medium free of BSE/TSE risks. Rippey-Cabelli HiVeg Agar Base is the modification of Rippey-Cabelli (RC) Agar formulated by Rippey and Cabelli (1). The medium is differential as it depends on ability of organisms to ferment trehalose. HiVeg hydrolysate and yeast extract support the growth of *Aeromonas* species. Ampicillin, and ethanol are the selective agents inhibiting gram positive bacteria, coliforms, *Shigella* species, *Proteus mirabilis* and *Actinomyces*. Ethanol inhibits overgrowth of *Klebsiella* species on the filter. Ampicillin is unsuitable as a selective agent with *Plesiomonas* (2). The limitation of medium is that it fails to recognize lysine-positive *Aeromonas* strains. As most enteric organisms ferment trehalose, specificity of this medium is insufficient due to clear characteristics to distinguish *Aeromonas* colonies from the *Enterobacteriaceae* (3). Sensitivity and specificity are higher when pure cultures are used (4).

Quality Control :**Appearance of powder**

Light green coloured, homogeneous, free flowing powder.

Product Profile :

Vegetable based (Code MV) ©	Animal based (Code M)
MV859 HiVeg hydrolysate No. 1	M859 Tryptose
Recommended for	: Differential and selective cultivation of <i>Aeromonas</i> species from water samples using membrane filter technique.
Reconstitution	: 32.34 g/l
Quantity on preparation (100g)	: 3.09 L
pH (25°C)	: 8.0 ± 0.2
Supplement	: Rippey-Cabelli Supplement (FD107), Ethanol.
Sterilization	: 121°C / 15 minutes.
Storage	: Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.

Gelling

Firm, comparable with 1.5% Agar gel.

Colour and Clarity

Dark green coloured, clear to slightly opalescent gel forms in petri plates.

Reaction

Reaction of 3.23% w/v aqueous solution is pH 8.0 ± 0.2 at 25°C

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 24 hours on addition of Rippey-Cabelli Supplement (FD107).

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery	Trehalose fermentation
<i>Aeromonas hydrophila</i> (7966)	10 ² -10 ³	luxuriant	>50%	+
<i>Escherichia coli</i> (25922)	10 ² -10 ³	none-poor	<20%	-
<i>Shigella flexneri</i> (12022)	10 ² -10 ³	inhibited	0%	-
<i>Staphylococcus aureus</i> (25923)	10 ² -10 ³	inhibited	0%	-

Key : + = acid production, yellow colour
- = no colour change (blue-green colour)

References :

- Rippey S.R. and Cabelli V.J., 1979, Appl. Environ. Microbiol. 38 (1):108.
- Von Graevenitz A. and Bucher C., 1983, J. Clin. Microbiol., 17 (1):16.
- Roland, F.P., 1977, Med. Microbiol. Immunol., 163:241.
- MacFaddin J.F., 1985, Media for Isolation - Identification Cultivation and Maintenance of Medical bacteria, Vol. I Williams and Wilkins, Baltimore.