

Feeley Gorman HiVeg™ Agar / Broth (F.G. HiVeg™ Agar / Broth)

MV811 / MV812

Feeley Gorman HiVeg Agar / Broth is recommended for the isolation and presumptive identification of *Legionella* species.

Composition ** :

Ingredients	MV811	MV812
	Grams/Litre	Grams/Litre
HiVeg acid hydrolysate	17.50	17.50
HiVeg extract	3.00	3.00
Starch	1.50	1.50
L-Cysteine hydrochloride	0.40	0.40
Ferric pyrophosphate, soluble	0.25	0.25
Agar	17.00	-

Final pH (at 25°C) 6.9 ± 0.2

** Formula adjusted, standardized to suit performance parameters

Directions :

Suspend 40 grams of MV811 or 23 grams of MV812 in 1000 ml distilled water. Boil to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45 - 50°C. Mix well before pouring into sterile tubes or petriplates.

Principle and Interpretation :

These media are prepared by using vegetable peptones in place of animal based peptones which makes the media free of BSE/TSE risks. Feeley Gorman HiVeg media are the modification of media formulated by Feeley et al (1) which are used as nonselective enrichment media for isolation of *Legionella* species.

HiVeg acid hydrolysate, HiVeg extract, L-Cysteine hydrochloride and ferric pyrophosphate act as sources of nutrients. Incubation should be carried out in the presence of 2.5% carbon-dioxide but if it exceeds, *Legionella* growth is inhibited due to the formation of acidic condition. It is recommended to inoculate F.G. HiVeg Agar and Legionella HiVeg Agar (MV809) with supplements simultaneously as *Legionella* usually do not grow initially on F.G. HiVeg Agar. *Legionella* species can be identified by their characteristic fluorescence in presence of UV light (2, 3).

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)
MV811/MV812 HiVeg acid hydrolysate HiVeg extract	M811/M812 Casein acid hydrolysate Beef extract
Recommended for	: The isolation and presumptive identification of <i>Legionella</i> species.
Reconstitution	: (MV811) : 40.0 g/l : (MV812) : 23.0 g/l
Quantity on preparation (500g)	: (MV811) : 12.5 L : (MV812) : 21.73 L
pH (25°C)	: 6.9 ± 0.2
Supplement	: None
Sterilization	: 121°C / 15 minutes.
Storage	: Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.

Gelling

Firm, comparable with 1.7% Agar gel of MV811.

Colour and Clarity

Yellow coloured, clear to slightly opalescent gel forms in petri plates, clear solution in tubes.

Reaction

Reaction of 4.0% w/v of MV811 and 2.3% w/v of MV812 aqueous solution is pH 6.9 ± 0.2 at 25°C.

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C after 4 days under 2.5% CO₂.

Organisms (ATCC)	Inoculum	Growth	Recovery	Fluorescence under 366 nm
<i>Legionella pneumophila</i> (33153)	10 ² -10 ³	good-luxuriant	>70%	bright yellow
<i>Legionella bozemannii</i> (33217)	10 ² -10 ³	good-luxuriant	>70%	blue-white
<i>Legionella micdadei</i> (33218)	10 ² -10 ³	good-luxuriant	>70%	none

References :

1. Feeley J.C., et al, 1978, J. Clin. Microbiol., 8(3): 320.
2. Herbert G.A., et al, 1959, Ann. Intern. Med., 92(1):45.
3. Herbert G.A., et al, 1980, Ann. Intern. Med., 92(1):53