C.L.E.D. HiVeg™ Agar (with Bromo Thymol Blue) / w/o Indicator MV792 / MV1146

C.L.E.D. HiVeg Agar with Bromo Thymol Blue/without indicator is recommended for isolation, enumeration and identification of urinary pathogens on the basis of lactose fermentation.

Composition** :

Ingredients	MV792 Grams/Litre	MV1146 Grams/Litre
HiVeg peptone	4.00	4.00
HiVeg hydrolysate	4.00	4.00
HiVeg extract	3.00	3.00
Lactose	10.00	10.00
L-Cystine	0.128	0.128
Bromo thymol blue	0.02	-
Agar	15.00	15.00

Final pH (at 25°C) 7.3 ± 0.2
** Formula adjusted, standardized to suit performance parameters

Directions :

Suspend 36.15 grams of MV792 in 1000 ml or 36.1 grams of MV1146 in 998 ml distilled water. Add rehydrated contents of 1 vial of Bromo thymol blue supplement (FD091) in MV1146. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle and Interpretation :

These media are prepared by using vegetable peptones in place of animal peptones which are free from BSE/TSE risks. These media are the modification of C.L.E.D. Agar as devised by Mackey and Sandy (1). The original experiments and trials to control the swarming of *Proteus* led to formulate C.L.E.D. (Cystine-Lactose-Electrolyte-Deficient) medium which contained L-Cystine promoting growth of coliforms(2). Lactose is incorporated serving as an immediate readily available carbon source required for growth of urinary pathogens (1). Incorporation of pH indicator bromothymol blue helps in identifying lactose fermenting colonies. (2) HiVeg peptone, HiVeg hydrolysate and HiVeg extract provides necessary nutrient required for luxuriant growth of organism. Appropriate dilutions of urine can be spread on surface of C.L.E.D HiVeg Agar to enumerate number of bacteria in urine sample under test (Bacteriuria).
In case of very low pH of urine, around 5.0, a low bacterial count is often reported. This medium does not support growth of *Shigella* species.

Quality Control:

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

Gelling
Firm, comparable with 1.5% Agar gel.

Colour and Clarity
Green coloured, very slightly opalescent gel forms in petri plates.

Reaction
Reaction of 3.61% w/v aqueous solution is pH 7.3 ± 0.2 at 25°C.

Product Profile :

Vegetable based (Code MV)◉	Animal based (Code M)
MV792/MV1146 HiVeg hydrolysate HiVeg peptone HiVeg extract	**M792/M1146** Casein enzymic hydrolysate Peptic digest of animal tissue Beef extract

Recommended for	:	Isolation, enumeration and identification of urinary pathogens on the basis of lactose fermentation.
Reconstitution	:	36.15 g/l
Quantity on preparation (500g)	:	13.83 L
(100g)	:	2.76 L
pH (25°C)	:	7.3 ± 0.2
Supplement	:	(MV1146) : Bromo Thymol Blue Supplement (FD091)
Sterilization	:	121°C / 15 minutes.

Storage : Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.

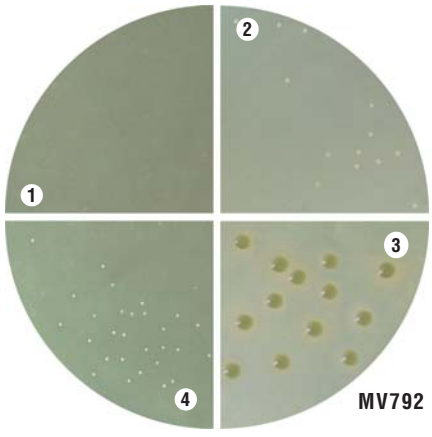
Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery	Colour of colony
Escherichia coli (25922)	10^2-10^3	luxuriant	>70%	yellow, opaque, center slightly deeper yellow
Klebsiella pneumoniae (13883)	10^2-10^3	luxuriant	>70%	yellow to whitish blue
Proteus vulgaris (13315)	10^2-10^3	luxuriant	>70%	blue
Salmonella serotype Typhi (6539)	10^2-10^3	luxuriant	>70%	bluish
Staphylococcus aureus (25923)	10^2-10^3	luxuriant	>70%	deep yellow
Enterococcus faecalis (29212)	10^2-10^3	luxuriant	>70%	slight yellowish or greenish

References :

1. Mackey and Sandys, 1965, Br. Med. J., 2:1286.
2. MacKey and Sandys, 1966, Br. Med. J., 1:1173.



MV792 C.L.E.D. HiVeg Agar (w/ Bromo Thymol Blue)
1. Control
2. *Staphylococcus aureus*
3. *Klebsiella pneumoniae*
4. *Enterococcus faecalis*

◉ Prepared from GMO free Vegetable proteins replacing Animal based peptones. Freedom from BSE/TSE worries.