Dextrose HiVeg™ Agar / Broth MV084 / MV044

Dextrose HiVeg Agar / Broth is used for cultivation of wide variety of microorganisms.

Composition** :

Ingredients	MV084 Grams/Litre	MV044 Grams/Litre
HiVeg hydrolysate No. 1	10.00	10.00
HiVeg extract	3.00	3.00
Dextrose	10.00	5.00
Sodium chloride	5.00	5.00
Agar	15.00	—
Final pH (at 25°C)	7.3 ± 0.2	7.2 ± 0.2

** Formula adjusted, standardized to suit performance parameters

Directions :

Suspend 43 grams of MV084 or 23 grams of MV044 in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. If desired, Blood Agar can be prepared by the addition of 5% v/v sterile, defibrinated sheep blood into sterile Dextrose HiVeg Agar, cooled to 50°C. Mix well and despense as desired.

Principle and Interpretation :

These media are prepared by completely replacing animal based peptones with vegetable peptones. Dextrose HiVeg media are the modification of Dextrose Media which are used for the cultivation of wide variety of microorganisms and specially used for making Dextrose Blood Agar (1). Dextrose HiVeg Broth like the conventional medium is used for antibiotic sensitivity testing using tube dilution method (2). This broth was found to be superior compared to Soyabean HiVeg Medium, particularly for sensitivity testing of Neomycin and Chlortetracycline.

Dextrose HiVeg Agar contains high concentration of dextrose as an energy source for the rapid growth of microorganisms. However this medium is not very suitable for the study of haemolysis because of high sugar content. HiVeg extract and HiVeg hydrolysate No. 1 serve as sources of nitrogenous compounds, sulphur, carbon, vitamins and minerals. Osmotic balance is maintained by sodium chloride.

Quality Control :

Appearance of Powder

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

Gelling

Firm, comparable with 1.5% Agar gel of MV084.

Product Profile :

Vegetable based (Code MV)◉	Animal based (Code M)
MV084/MV044 HiVeg hydrolysate No. 1 HiVeg extract	**M084/M044** Tryptose Beef extract

Recommended for	:	Cultivation of wide variety of microorganisms
Reconstitution	:	(MV084) : 43.0 g/l
	:	(MV044) : 23.0 g/l
Quantity on preparation (500g):		(MV084) : 11.62 L
(100g):		(MV084) : 2.32 L
(500g):		(MV044) : 21.73 L
(100g):		(MV044) : 4.34 L
pH (25°C)	:	(MV084) : 7.3 ± 0.2
	:	(MV044) : 7.2 ± 0.2
Supplement	:	Sterile Defibrinated Sheep Blood
Sterilization	:	121°C / 15 minutes.

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

Colour and Clarity

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

Reaction

Reaction of 4.3% w/v aqueous solution of MV084 is pH 7.3 ± 0.2 at 25°C.

Reaction of 2.3% w/v aqueous solution of MV044 is pH 7.2 ± 0.2 at 25°C.

Cultural Response

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

Organisms (ATCC)	Inoculum (CFU)	Growth (Plain)	Growth w/blood	Recovery w/blood
Bordetella pertussis (8467)	10^2-10^3	good-luxuriant	luxuriant	>70%
Neisseria meningitidis (13090)	10^2-10^3	good-luxuriant	luxuriant	>70%
Neisseria gonorrhoeae (19424)	10^2-10^3	good-luxuriant	luxuriant	>70%
Streptococcus pyogenes (19615)	10^2-10^3	good-luxuriant	luxuriant	> 70%
#*Clostridium perfringens* (12919)	10^2-10^3	fair-good	luxuriant	> 70%

Key : # = Incubated anaerobically

References :

1. Norton, 1932, J. Lab. Clin. Med., 17:585.
2. Walsbren Carr and Dunnett, 1951, Am. J. Clin. Path. 21:884.

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