

Standard Methods Caseinate HiVeg™ Agar

MV588

Standard Methods Caseinate HiVeg Agar is recommended for detection of proteolytic microorganisms.

Composition ** :

Ingredients	Grams/Litre
HiVeg hydrolysate	5.0
Yeast extract	2.5
Dextrose	1.0
Veg protein	10.0
Trisodium citrate	4.41
Calcium chloride	2.22
Agar	15.0

** Formula adjusted, standardized to suit performance parameters.

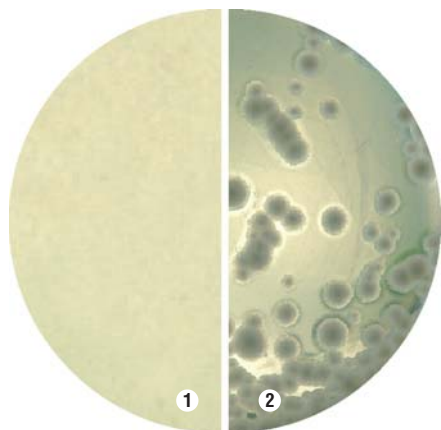
Directions :

Suspend 40.13 grams 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.

Principle and Interpretation :

Standard Methods Caseinate HiVeg Agar is prepared by using HiVeg hydrolysate which is free of BSE/TSE risks. This medium is the modification of Standard Methods Caseinate Agar which is prepared as per the formula described by Martley et al (1) and is recommended by APHA (2).

Veg protein is the major protein source for the proteolytic organisms. HiVeg hydrolysate and yeast extract provide nitrogenous nutrients to the growing proteolytic organisms. Dextrose is the carbohydrate source.

**MV588 Standard Methods Caseinate HiVeg Agar**

1. Control
2. *Bacillus cereus*

Product Profile :

Vegetable based (Code MV)©	Animal based (Code M)
MV588 HiVeg hydrolysate Veg protein	M588 Casein enzymic hydrolysate Sodium caseinate

Recommended for : Detection of proteolytic microorganisms.

Reconstitution : 40.13 g/l

Quantity on preparation (100g) : 2.48 L

pH (at 25°C) : -

Supplement : None

Sterilization : 121°C / 15 minutes.

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

Proteolytic organisms form white or off white precipitate around the colony. Organisms which are strongly proteolytic can breakdown the precipitate formed around the colonies to soluble components with the formation of an inner transparent zone. For the enumeration of proteolytic psychrotropic bacteria, inoculated plates should be incubated for 10 days at 7°C.

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

Yellow coloured opalescent gel forms in petri plates.

Cultural Response

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

Organisms (ATCC)	Inoculum (CFU)	Growth	Proteolytic activity *
<i>Bacillus cereus</i> (11778)	10 ² -10 ³	luxuriant	+
<i>P. aeruginosa</i> (27853)	10 ² -10 ³	luxuriant	+
<i>E. coli</i> (25922)	10 ² -10 ³	luxuriant	-

Key: * = clear zone / halo

References :

1. Martley F.G., Jayashankar S.R. and Lawrence R.C., 1970, J. Appl. Bact., 33:363.
2. Downes FP and Ito K (Eds.), 2001, Compendium of Methods For The Microbiological Examination of Foods, 4th ed., APHA, Washington, D.C.