Antibiotic HiVeg Assay Medium No. 32

MV1141

Antibiotic HiVeg Assay Medium No. 32 is recommended for preparing inoculum of *Bacillus subtilis* during assay of Dihydrostreptomycin and Vancomycin.

Composition**

Ingredients	Gms / Litre
HiVeg peptone	6.000
HiVeg hydrolysate	4.000
Yeast extract	3.000
HiVeg extract	1.500
Dextrose	1.000
Manganese sulphate	0.300
Agar	15.000
Final pH (at 25°C)	6.6±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 30.8 gms in 1000 ml purified/distilled water. Heat to boiling to disslove the medium completely. Sterilise by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle And Interpretation

Antibiotic HiVeg Assay Medium No. 32 is prepared by incorporating vegetable peptones in place of animal peptones, making the medium BSE-TSE risks free. This can be used for the same purpose of Antibiotic Assay Medium No. 32 that is formulated in accordance to FDA (1) and is a modification of Antibiotic assay Medium No.1. This medium is used to develop inoculum of *Bacillus subtilis* for antibiotic assay.

Essential nutrients, vitamins, mineral, trace elements and growth factors are supplied by HiVeg Peptone, HiVeg hydrolysate, yeast extract and HiVeg extract. Dextrose in the medium serves as the carbon source for stimulating the growth of the test microorganism. Manganese sulphate in this medium facilitates the sporulation and growth of *Bacillus subtilis* (2,3,4), which is generally used as test organisms for plate assay of Dihydrostreptomycin and Vancomycin.

Note: For Antibiotic Assay Methods and Selection of Antibiotic HiVeg Assay Medias Refer Section Antibiotic HiVeg Assay Media.

Quality Control

Appearance
Cream to yellow homogeneous free flowing powder

Gelling
Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium
Yellow clear to slightly opalescent gel forms in Petriplates

Reaction
Reaction of 3.08% w/v aqueous solution at 25°C. pH : 6.6±0.2

pH
6.40-6.80

Cultural Response
MV1141: Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Organism	Inoculum (CFU)	Growth	Recovery	Antibiotics assayed
Bacillus subtilis ATCC 6633	50-100	good-luxuriant	>=70%	Dihydrostreptomycin,Vancomycin

Storage and Shelf Life

Store below 30°C in tightly closed container and use freshly prepared medium . Use before expiry date on the label.

Reference

1. Tests and Methods of Assay of Antibiotics and Antibiotic containing Drugs, FDA, CFR, 1983 Title 21, Part 436, Subpart D , Washington, D.C.: U.S. Government Printing Office, paragraphs 436, 100-436, 106, p. 242-259, (April 1).
2. Vasantha & Freese, 1979, J.Gen.Microbiol. 112:329-336
3. Charney, J., Fisher, W.P. and Hegarty, C.P. 1951. J. Bacteriol. 62:145.
4. Curran, H.R. and Evans, F.R. 1954. J. Bacteriol. 67: 489.

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