Technical Data

Antibiotic HiVeg Assay Medium No.40 MV1143

Antibiotic HiVeg Assay Medium No.40 is used for the microbiological assay of Thiostrepton using *Enterococcus hirae* (*Streptococcus faecium*) as the test organism.

Composition**

Ingredients	Gms / Litre
HiVeg hydrolysate	2.500
HiVeg peptone	2.500
Yeast extract	20.000
Dextrose	10.000
Potassium dihydrogen phosphate	2.000
Polysorbate 80	0.100
Agar	10.000
Final pH (at 25°C)	6.7±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 47.1 grams in 1000 ml purified/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

Antibiotic HiVeg Assay Medium No. 40 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 HiVeg Medium No. 40, This medium is used as a maintenance medium for test organism *Enterococcus hirae* ATCC 10541 (*Streptococcus faecium*) used for in the assay of Thiostrepton. Equivalent animal based medium is in accordance with USP (1). Essential amino acids, mineral and growth factors are supplied by Peptone, HiVeg hydrolysate and yeast extract in this medium. Dextrose functions as carbon and energy source for enhancing the growth of test organism. During maintenance of the test organism, good buffering action is maintained by phosphates in the medium. Incorporation of polysorbates reduces the surface tension, maintaining uniform suspension of cells and also can neutralize phenolic compounds in the test sample, if any.

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 1.0% Agar gel.

Colour and Clarity of prepared medium
Light amber clear to slightly opalescent gel forms in petriplates

Reaction
Reaction of 4.71% w/v aqueous solution at 25°C. pH : 6.7±0.2

pH
6.50-6.90

Cultural Response
MV1143: Cultural characteristics observed after an incubation at 35 - 37°C for 18 - 24 hours.

Organism	Inoculum (CFU)	Growth	Recovery	Antibiotics assayed
Enterococcus hirae ATCC 10541	50-100	luxuriant	>70%	Thiostrepton

Storage and Shelf Life

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

Reference

1. United States Pharmacopoeia 2011,USP 34/NF 29, US Pharmacopoeial Convention, Inc., Rockville, MD.

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