

## CM 2018 – ANTIBIOTIC ASSAY MEDIUM NO. 32 (VEG.)

### INTENDED USE

For microbiological assay of Dihydrostreptomycin and Vancomycin by preparing inoculum of Bacillus subtilis ATCC 6633.

### PRODUCTSUMMARY AND EXPLANATION

AntibioticVeg AssayMedium No. 32is preparedby 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 and is a modification of Antibiotic assay Medium No.1. This medium is used to develop inoculum of Bacillus subtilis for antibiotic assay.

### COMPOSITION

Ingredients	Gms / Ltr
Veg Peptone	6.000
Veg hydrolysate	4.000
Yeast extract	3.000
Veg extract	1.500
Dextrose	1.000
Manganese sulphate	0.300
Agar	15.000

### PRINCIPLE

Essentialnutrients, vitamins, mineral, trace elements and growth factors are supplied by Veg Peptone, Veg hydrolysate, yeast extract and Veg 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, which is generally used as test organisms for plate assay of Dihydrostreptomycin and Vancomycin.

### INSTRUCTION FOR USE

Suspend 30.8 gms in 1000ml purified/distilled water.

Heat to boiling to dissolve the medium completely.

Dispense and sterilise by autoclaving at 15 psi pressure (121°C) for 15 minutes.

Advice: Recommended for the microbiological assay of Dihydrostreptomycin and Vancomycin.

### QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow coloured homogeneous free flowing powder.
Appearance of prepared medium	: Yellow coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 6.6±0.2

### INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Antibiotics assayed	Incubation Temperature	Incubation Period



Bacillus subtilis	6633	50-100	Good-luxuriant	>=50%	Dihydrostreptomycin, Vancomycin	32-35°C	5 Days
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#### PACKAGING:

Inpacksizeof500 gm bottles.

#### STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

#### DISPOSAL

Afteruse,prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

#### REFERENCES

1. Curran,H.R. andEvans, F.R. 1954. J. Bacteriol. 67: 489.
2. 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, (April1).
3. Vasantha & Freese, 1979, J.Gen.Microbiol. 112:329-336
4. Charney, J., Fisher, W.P. and Hegarty, C.P. 1951. J. Bacteriol. 62:145. 5. Curran, H.R. and Evans, F.R. 1954. J. Bacteriol. 67: 489



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

\*For LabUse Only

