

TM 019 - ANTIBIOTIC ASSAY MEDIUM NO. 8 (BASE AGAR W/LOW pH)

INTENDED USE

For microbiological assay of Mitomycin, Plicamycin and Vancomycin.

PRODUCT SUMMARY AND EXPLANATION

Antibiotic Assay Media are used in the performance of antibiotic assays. Grove and Randall have elucidated those antibiotic assays and media in their comprehensive treatise on antibiotic assays. Schmidt and Moyer have reported the use of antibiotic assay medium for the liquid formulation used in the performance of antibiotic assay. These media are prepared according to the specifications detailed in the USP and FDA.

COMPOSITION

Ingredients	Gms / Ltr		
Peptone	6.000		
Yeast extract	3.000		
Beef extract	1.500		
Agar	15.000		

PRINCIPLE

The medium contains beef extract, yeast extract and Peptone serves as a source of nutrients and growth factors.

INSTRUCTION FOR USE

- Dissolve 25.5 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

 $Advice: Recommended \ for \ the \ microbiological \ assay \ of \ Oxytetracycline, \ Tetracycline \ and \ Vancomycin.$

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder. **Appearance of prepared medium** : Light amber coloured opalescent gel forms in Petri plates.

pH (at 25°C) : 5.9±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Antibiotics assayed	Incubation Temperature	Incubation Period
Bacillus subtilis subsp. spizizenii	6633	50-100	Luxuriant	>=70%	Mitomycin, Vancomycin	35-37°C	18-24 Hours
Bacillus cereus var mycoides	1177 8	50-100	Luxuriant	>=70%	Oxytetracycline, Tetracycline	35-37°C	18-24 Hours









PACKAGING:

In pack size of 500 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.

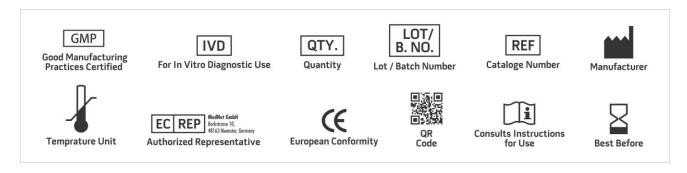
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

- 1. Grove and Randall, 1955, Assay Methods of Antibiotics Medical Encyclopedia, Inc. New York.
- 2. Schmidt and Moyer, 1944, J. Bact., 47:199.
- 3. 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).
- 6. United States Pharmacopoeia 2019, US Pharmacopoeial Convention, Inc., Rockville, MD.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only Revision: 08 Nov., 2019







