

## CM 20,084 – ANTIBIOTIC ASSAY MEDIUM B (as per IP)

### INTENDED USE

Formicrobiological assay of antibiotics.

### PRODUCT SUMMARY AND EXPLANATION

This medium is commonly used as base agar for microbiological agar diffusion assays for wide variety of antibiotics. These agar diffusion assays can be performed by cylinders, punched-hole or paper disc tests. This medium is prepared according to the specifications detailed in the IP and CFR.

To perform the antibiotic assay, the Base Agar should be prepared on the same day as the test. For the cylinder method, a base layer of 21 ml is required. Once the base medium has solidified, seed layer inoculated with the standardized culture can be overlaid. Even distribution of the layer is important.

### COMPOSITION

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

### PRINCIPLE

Peptone, yeast extract and beef extract nitrogenous, vitamins and mineral requirement for the growth of test organisms for the test organisms. This medium provides solidified substratum for growth of organisms. This medium is widely used to prepare the base layer in the microbiological assay of antibiotics such as bacitracin, novobiocin and penicillin.

### INSTRUCTION FOR USE

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

### QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder : Cream to yellow coloured homogeneous free flowing powder.
- Appearance of prepared medium : Amber coloured slightly opalescent gel forms in Petri plates.
- pH (at 25°C) : 6.55±0.05

### INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Antibiotics assayed	Incubation Temperature	Incubation Period
Bacillus subtilis	6633	50-100	Luxuriant	>=70%	Spiramycin	35-37°C	18-48 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.

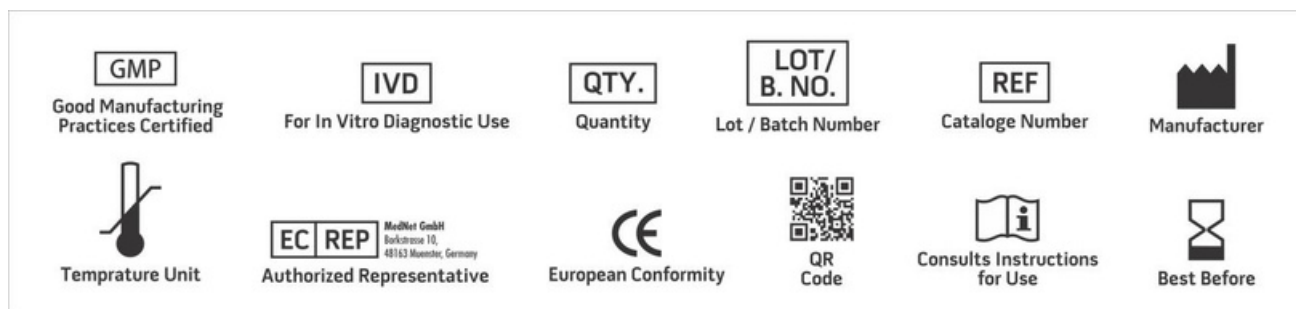
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

**DISPOSAL**

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

**REFERENCES**

1. Indian Pharmacopoeia 2010, Ministry of Health and Family welfare, Government of India, New Delhi.
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, (April 1).



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

\*For Lab Use Only