

TM 1971 – ANTIBIOTIC ASSAY MEDIUM I

INTENDED USE

For the microbiological turbidimetric assay of Apramycin using Salmonella cholerasuis.

PRODUCT SUMMARY AND EXPLANATION

This medium is formulated in accordance to British Pharmacopoeia. This medium is employed for turbidimetric assay of Apramycin, an antibiotic of the aminocyclitol group, using Salmonella cholerasuis. Turbidimetric methods for determining the potency of antibiotics are inherently more accurate and more precise than comparable agar diffusion procedures.

COMPOSITION

Ingredients	Gms / Ltr		
Casein enzymic hydrolysate	6.000		
Yeast extract	2.000		
D-Glucose	10.000		

PRINCIPLE

The medium contains essential nutrients for growth of test organism is provided by Tryptone and yeast extract in this medium. D-Glucose serves as source of carbon to the test organism. Turbidimetric antibiotic assay is based on the change or inhibition of growth of a test microorganism in a liquid medium containing a uniform concentration of an antibiotic. Use of this method is appropriate only when test samples are clear.

INSTRUCTION FOR USE

- Dissolve 18 grams in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
- Dispense into sterile tubes or flasks or as desired.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow coloured homogeneous free flowing powder : Light yellow coloured clear to slightly opalescent solution. Appearance of prepared medium

: 8.00±0.2 pH (at 25°C)

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Serial dilution with	Incubation Temperature	Incubation Period
Salmonella Cholerasuis	12011	50-100	Luxuriant	Apramycin	35-37°C	12-24 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.

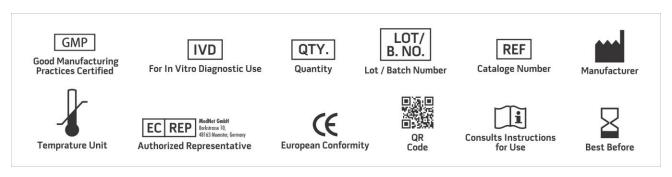
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. British Pharmacopoeia, 2009, British Pharmacopoeia Commission



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

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