



Antibiotic Assay Medium B

ME1346

Antibiotic Assay Medium B is used for the microbiological assay of Colistimethate sodium using *Bordetella bronchiseptica* ATCC 4617 and *Escherichia coli* ATCC 10536 in accordance with European Pharmacopoeia .

Composition**

Ingredients	Gms / Litre
Pancreatic digest of casein	17.000
Papaic digest of soyabean	3.000
Sodium chloride	5.000
Dipotassium hydrogen phosphate	2.500
Glucose monohydrate	2.500
Agar	15.000
pH after sterilization	7.3±0.1

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 44.77 grams of dehydrated medium powder in 1000 ml R-water/purified/distilled water with 10 ml polysorbate 80. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well before pouring into sterile Petriplates. Adjust the pH of the medium, using freshly prepared buffer solution as recommended by the European pharmacopoeia for the antibiotic assayed.

Principle And Interpretation

Antibiotic Assay Medium B is prepared according to European Pharmacopoeia (1) and is recommended for the assay of Colistimethate sodium using *Bordetella bronchiseptica* and *Escherichia coli* as the test organism. Combination of pancreatic digest of casein and papaic digest of soyabean provides essential nutrients for the growth of test organisms. Glucose monohydrate provides fermentable source of carbon, and enhances the growth of test organisms. Phosphates in the medium enhance buffering action and sodium chloride maintains osmotic equilibrium. Freshly prepared plates should be used for antibiotic assays. Test organisms are inoculated in sterile seed agar cooled to 40-45°C and spread evenly over the surface of solidified base agar. All conditions in the microbiological assay must be controlled carefully. The use of standard culture media in the test is one of the important steps for good results.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Light amber coloured clear to slightly opalescent gel forms in Petri plates

pH

7.20-7.40

Cultural Response

ME1346: Cultural characteristics observed after an incubation at 35-39°C for 18-24 hours.

Organism	Inoculum (CFU)	Growth	Recovery	Antibiotics assayed
<i>Bordetella bronchiseptica</i> ATCC 4617	50-100	luxuriant	≥70%	Colistimethate sodium
<i>Escherichia coli</i> ATCC 10536	50-100	luxuriant	≥70%	Colistimethate sodium

Storage and Shelf Life

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

Reference

1. European Pharmacopoeia, 2011, European Department, for the Quality of Medicines.

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