



Dehydrated Culture Media
Bases / Media Supplements

Technical Information

Antibiotic Assay Medium B

Product Code: DM 2346B

Application: - Antibiotic Assay Medium B is recommended for the microbiological assay of Colistimethate sodium sulphate using *Bordetella bronchiseptica* and *Escherichia coli* in accordance with British 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

Principle & Interpretation

Antibiotic Assay Medium B is prepared according to British Pharmacopoeia (1) and is recommended for the microbiological assay of Colistimethate sodium using *Bordetella bronchiseptica* ATCC 4617 and *Escherichia coli* ATCC 10536.

Combination of pancreatic digest of casein and papaic digest of soyabean supply essential nutrients for the growth of test organisms. Glucose monohydrate provides as a fermentable source and inhibit the growth of test organisms. Phosphate 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.

Methodology

Suspend 44.77 grams of dehydrated culture medium powder in 1000 ml distilled water with 10 ml polysorbate 80. Mix thoroughly & heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Adjust the pH of the medium, using freshly prepared buffer solution as recommended by the British Pharmacopoeia for the antibiotic assayed.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity

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

pH Range

7.20-7.40





Dehydrated Culture Media
Bases / Media Supplements

Cultural Response

DM2346B: Cultural characteristics observed after an incubation at 35-39°C for 18- 24 hours.

Organism	Inoculum (CFU)	Growth	Recovery	Antibiotics assayed
Cultural Response				
<i>Bordetella bronchiseptica</i> ATCC 4617	50-100	luxuriant	>=50%	Colistimethate sodium
<i>Escherichia coli</i> ATCC10536	50-100	luxuriant	>=70%	Colistimethate sodium

Storage and Shelf Life

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

Prepared Media: 2-8° in sealable plastic bags for 2-5 days.

Further Reading

1. British Pharmacopoeia, 2011, British Pharmacopoeia Commission

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at CDH is true and accurate
- Central Drug House Pvt. Ltd. reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents. Do not use the products if it fails to meet specifications for identity and performance parameters.

