

Technical Information

Antibiotic Assay Medium G

Product Code: DM 1553B

Application: - Antibiotic Assay Medium G is recommended for the microbiological assay of Bleomycin sulphate using *Mycobacterium smegmatis*, as a test organism in accordance with British Pharmacopoeia.

Composition**

Ingredients	Gms / Litre
Peptone	10.000
Meat extract	10.000
Sodium chloride	3.000
Agar	15.000
Final pH (after sterilization)	7.0±0.1

**Formula adjusted, standardized to suit performance parameters

Principle & Interpretation

Antibiotic Assay Medium G is formulated in accordance to British Pharmacopoeia (1). It is employed widely as base agar for agar diffusion assay of Bleomycin using *Mycobacterium smegmatis*. It is also used for preparing the inoculum of *Mycobacterim smegmatis* for assay. In this medium the nutrients essential for growth of test organism is provided by peptone and meat extract. Agar provides excellent solid substratum for support and overlaying of seed agar, for the assay of Bleomycin. Addition of glycerol is important for provision of carbon to the test organism.

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.

Methodology

Suspend 38 grams of dehydrated media powder in 1000 ml distilled water containing 10 grams glycerol. Mix thoroughly and heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Advice: Recommended for the microbiological assay of Bleomycin sulphate.

Quality Control

Appearance

Cream to yellow coloured homogeneous free flowing powder.

Gelling

Firm, comparable with 1.5% Agar gel.

Colour and Clarity

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

Reaction

Reaction of 3.8% w/v aqueous solution containing 1% glycerol. pH : 7.0±0.1

pH Range

6.90-7.10

Cultural Response

DM1553B: Cultural characteristics observed after an incubation at 35-37°C for 18-48 hours.



Dehydrated Culture Media
Bases / Media Supplements

Organism	Inoculum (CFU)	Growth	Antibiotic assayed
<i>Mycobacterium smegmatis</i> ATCC 607	50-100	luxuriant	Bleomycin sulphate

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, 2016, The Stationery Office, British Pharmacopoeia

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
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