Antibiotic Assay Agar D

Intended Use
Antibiotic Assay Agar D is used for microbiological assay of antibiotics in accordance with Indian Pharmacopoeia.

Summary
Antibiotic Assay Agar D is employed to analyze the Neomycin, Erythromycin content as per FDA and the IP. This medium is formulated in accordance to IP and CFR (the Code of Federal Regulations). This medium provides a pH range of 8 while Antibiotic assay Medium A provides pH range of 6.5-6.7.

Principle
Peptone, pancreatic digest of casein, yeast and beef extract supplies nutrients, vitamins, mineral, trace elements and growth factors. Agar provides excellent medium for antibiotic diffusion and gives well defined zones of inhibition. Dextrose in the medium serves as the carbon source for stimulating the growth of the test microorganism. Higher pH provides the optimal conditions for activity of antibiotic and also supports the growth of test organisms.

Formula*

Ingredients	g/L
Peptone	6.0
Yeast extract	3.0
Pancreatic Digest of casein	4.0
Beef extract	1.5
Dextrose	1.0
Agar	15.0
Final pH (at 25°C)	7.9 ± 0.1

*Adjusted to suit performance parameters

Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Specimen Collection and Handling
Ensure that all samples are properly labelled.
Follow appropriate techniques for handling samples as per established guidelines.
Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure The samples must be stored and tested within the permissible time duration.
After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions
1. Suspend 30.50 g of the powder in 1000 mL purified / distilled water.
2. Heat to boiling to dissolve the powder completely
3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.

Quality Control
Dehydrated Appearance: Cream to yellow coloured, homogeneous, free flowing powder.
Prepared Appearance: Light yellow coloured clear to slightly opalescent gel forms in petridishes.
Cultural Response:Cultural characteristics observed after an incubation at 32-35°C for 24 hours to 5 days.

Organism (ATCC)	Growth	Antibiotics Assayed by Cylinder Plate Method
Kocuria rhizophila Strain PCI 1001 (9341)	Good	Erythromycin
Staphylococcus epidermidis strain PCI 1200 (12228)	Good	Gentamycin, Neomycin, Sisomicin
Bacillus pumilis (14884)	Good	Kanamycin sulphate, Framycetin

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

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).
3. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201010120500	Dehydrated Culture Media	500 g