# **Antibiotic Assay Agar No.1**



Medium used for the identification and determination of antibiotic potency by the microbial assay technique following the USP specifications.

## CONTENTS (Liter)

Beef Extract	1.5 g
Yeast Extract	3.0 g
Casein Peptone	4.0 g
Peptone	6.0 g
Glucose	1.0 g
Agar	15.0 g
Final pH = $6.5 \pm 0.2$ at $25^{\circ}$ C	_

#### PROCEDURE

Suspend 30.5 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Mix well. Pour into petri dishes.

## INTERPRETATION

Antibiotic Assay Agar No.1 is a medium used for identification and determination of antibiotic potency by the microbial assay technique following the USP specifications. Beef extract, yeast extract, casein peptone and peptone are the nitrogen and vitamin sources. Glucose is the fermentable carbohydrate. Agar is the solidifying agent.

#### TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 35  $\pm$  2°C for 18 - 24 hours. Refer appropriate references for recommended test procedure.

## QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: beige Prepared medium

Appearance: slightly opalescent

Color: light amber

Incubation conditions:  $35 \pm 2^{\circ}$ C / 18 - 24 hours

Microorganism	ATCC	Inoculum CFU	Growth
Staphylococcus aureus	6538	50-100	good

## STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

## REFERENCES

- 1. Grove and Randall. 1955. Assay methods of antibiotics. Medical Encyclopedia, Inc. New York, N.Y.
- 2. United States Pharmacopeial Convention, Inc. 2001. The United States pharmacopeia 25/The national formulary 20–2002. United States Pharmacopeial Convention, Inc., Rockville, Md.
- 3. Horwitz (ed.). 2000. Official methods of analysis of AOAC International, 17<sup>th</sup> ed., vol. 1. AOAC International, Gaithersburg, Md.
- 4. Abraham, Chain, Fletcher, Florey, Gardner, Heatley and Jennings. 1941. Lancett ii:177.

## PACKAGE

Cat. No : MB-A1314 Antibiotic Assay Agar No.1	500 G
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