

Antibiotic Assay Broth No.3



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

• CONTENTS (Liter)

Peptone	5.0 g
Yeast Extract	1.5 g
Beef Extract	1.5 g
Sodium Chloride	3.5 g
Dextrose	1.0 g
Dipotassium Phosphate	3.68 g
Monopotassium Phosphate	1.32 g
Final pH = 7.0 ± 0.2 at 25°C	

• PROCEDURE

Suspend 17.5 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 tubes.

• INTERPRETATION

Antibiotic Assay Broth No.3 is a medium used for the identification and determination of antibiotic potency by the microbial assay technique following the USP specifications. Peptone, yeast extract and beef extract are the nitrogen and vitamin sources. Sodium chloride maintains the osmotic balance. Dextrose is a carbon and energy source. Dipotassium phosphate and monopotassium phosphate are the buffering agents.

• TECHNIC

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

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light beige

Prepared medium

Appearance: slightly opalescent

Color: light amber

Incubation conditions: 35 ± 2°C / 18 - 24 hours

Microorganism	ATCC	Inoculum CFU	Growth
<i>Enterococcus hirae</i>	10541	50-100	good
<i>Escherichia coli</i>	9637	50-100	good
<i>Klebsiella pneumoniae</i>	13883	50-100	good
<i>Staphylococcus aureus</i>	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, 17th ed., vol. 1. AOAC International, Gaithersburg, Md.
4. Foster and Woodruff. (1943). J. Bacteriol. 46:187.

• PACKAGE

Cat. No : MB-A1316 Antibiotic Assay Broth No.3	500 G
---	-------