

TECHNICAL SHEET

BS002	ANTIBIOTIC ASSAY MEDIUM NO.2 (BASE AGAR)				
Formula					
Ingredients:	gms/lit.				
Peptone	6.00				
Yeast extract	3.00				
Meat extract#	1.50				
Agar	15.00				
# Equivalent to Beef extract					
Final pH (at 25°C):	6.6 ± 0.2				
Directions :					
Suspend 25.5 grams in 1000 ml purified/ distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates. Advice: Recommended for the microbiological assay of Spiramycin.					
Principle :					
This medium is commonly used as base agar for microbiological agar diffusion assays for wide variety of antibiotics. Agar diffusion assays can be performed by cylinders, punched-hole, or paper disc tests. Peptone, yeast, and meat extract provide the nitrogenous and carbonaceous compounds, long chain amino acids, vitamins, and mineral requirement for the growth of test organisms. This medium provides solidified substratum for growth of organisms and supports the over layering of soft agar.					
To perform the antibiotic assay the Antibiotic assay medium No.2 is used as Base Agar. This medium 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, Antibiotic assay medium No.1 as seed agar, inoculated with the standardized culture can be overlaid. Even distribution of the layer is important.					
QC Tests – (I) Dehydrated Medium					
Colour :	Cream to yellow				
Appearance :	Homogeneous Free Flowing powder				
(II) Rehydrated medium					
pH (post autoclaving/heating):	6.6 ± 0.2				
Colour (post autoclaving/heating) :	Amber				
Clarity (post autoclaving/heating) :	Clear to slightly opalescent				
(III) Q.C. Test Microbiological					
Cultural characteristics observed after 18-24 hrs. at 35-37°C.					
MICROORGANISM (ATCC)	Inoculum (CFU)	Growth	Recovery	ANTIBIOTIC ASSAYED	BASAL LAYER
Bacillus subtilis (6633)	50-100	luxuriant	>=70%	Spiramycin	
Micrococcus luteus (10240)	50-100	luxuriant	>=70%		Bacitracin
Staphylococcus aureus (29737)	50-100	luxuriant	>=70%		Amikacin, Cephalothin, Cephapir in, Chlortetracycline, Nafcillin, Oxytetracycline, Rolitetracycline
Staphylococcus epidermidis (12228)	50-100	Good luxuriant	>=70%		Tetracycline
Staphylococcus aureus (9144)	50-100	luxuriant	>=70%		Tylosin
Klebsiella pneumonia (10031)	50-100	luxuriant	>=70%		Capreomycin, Streptomycin, Troleandomycin, Gramicidin, Thiostrepton, Tobramycin
Enterococcus hirae (10541)	50-100	luxuriant	>=70%		
Escherichia coli (10536)	50-100	luxuriant	>=70%		Chloramphenicol, Spectinomycin

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Precautions :	1. For Laboratory Use.				
	2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.				
Limitations :	1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.				
	2. Freshly prepared plates must be used or it may result in erroneous results.				
Use:	It is used as a basal medium for microbiological assay of antibiotics.				
Storage:	Dehydrated medium- below 30°C Prepared medium- Between 2 to 8°C.				
Packing:	500 gm bottle				
Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
BS002	25.5 g/l	19.60 L	6.6 ± 0.2	Nil	121°C / 15 minutes

Disclaimer:

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related BIOMARK LABORATORIES publications.

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