

CM 20155 – ANTIBIOTIC ASSAY MEDIUM NO.1 (SEED AGAR) (VEG.)

INTENDED USE

For microbiological assay of β -lactam and other antibiotics.

PRODUCT SUMMARY AND EXPLANATION

Antibiotic VegAssay Medium No.1 (Seed Veg Agar) is prepared by replacing animal based peptones with vegetable peptones, making the medium BSE-TSE risks free. It can be used for the same purpose of Antibiotic Assay Medium No.1 (Seed Agar). The potency of an antibiotic can be determined by chemical, physical and biological assays. Biological assays offer the most convenient method, since a reduction in the antimicrobial activity of a specific antibiotic is not usually displayed in chemical methods. Biological testing may be performed by either dilution (turbidimetric) or diffusion methods. The choice of methodology is often based on many factors, including relative ease of performance, flexibility and use of automated or semi-automated devices for both identification and susceptibility testing. Grove and Randall have elucidated those antibiotic assays and media in their comprehensive treatise on antibiotic assays. Antibiotic Veg Assay Medium No.1 is used in the microbiological assay of β -lactam and other antibiotics and as seed agar with *Micrococcus luteus* (ATCC 9341) for plate assay of Bacitracin, with *Staphylococcus aureus* (ATCC 29739) for cylinder plate assay of Cephalexin, Cephalothin, Cephapirin, Cloxacillin, Dicloxacillin, Methicillin, Nafcillin, Oxacillin, Penicillin-G and *Staphylococcus epidermidis* (ATCC 12228) for plate assay of Novobiocin. This media can be used according to the specifications detailed in various pharmacopoeias.

Antibiotic assays are normally performed in freshly prepared media. Test organisms are spread evenly over the surface of solidified base agar. After incubation, the concentration of the antibiotic being assayed is determined by measuring the zone of inhibition obtained, with that of reference standard antibiotic. All conditions in the microbiological assay must be carefully controlled. The use of standard culture media in the test is one of the important steps for good results.

COMPOSITION

Ingredients	Gms / Ltr
Veg peptone	6.000
Veg hydrolysate	4.000
Yeast extract	3.000
Veg extract	1.500
Dextrose	1.000
Agar	15.000

PRINCIPLE

Nutrients and growth factors are supplied by the Veg peptone, Veg hydrolysate, yeast extract and Veg extract. Dextrose is supplemented as a carbon and energy source.

INSTRUCTION FOR USE

Dissolve 30.5 grams in 1000 ml purified/distilled water.

Heat to boiling to dissolve the medium completely.

Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

Advice: Recommended for the microbiological assay of Bacitracin, Cephalexin, Cephaloglycin, Cephadrine, Cephaloridine, Cephalothin, Cephaperin, Cephazolin, Cloxacillin Cycloserine, Dicloxacillin, Methicillin, Nafcillin, Novobiocin, Oxacillin, Penicillin-G and Phenoxymethyl Penicillin.

QUALITY CONTROL SPECIFICATIONS






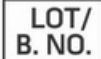








Appearance of Powder : Cream to yellow homogeneous free flowing powder.
 Appearance of prepared medium : Yellow coloured clear to slightly opalescent gel forms in Petri plates.
 pH (at 25°C) : 6.6±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Inoculum medium	Antibiotics assayed	Incubation Temperature	Incubation Period
Bordetella bronchiseptica	4617	50-100	Luxuriant	>=70%	Colistimethate sodium, Colistin, Polymyxin B	-	32-35°C	18-24 Hours
Escherichia coli	10536	50-100	Luxuriant	>=70%	Chloramphenicol	-	32-35°C	18-24 Hours
Klebsiella pneumoniae	10031	50-100	Luxuriant	>=70%	Capreomycin, Dihydrostreptomycin, Neomycin, Streptomycin, Troleandomycin	-	36-37.5°C	18-24 Hours
Micrococcus luteus	9341	50-100	Luxuriant	>=70%	Erythromycin	-	32-35°C	18-24 Hours
Micrococcus luteus	10240	50-100	Luxuriant	>=70%	Bacitracin	Bacitracin	32-35°C	18-24 Hours
Pseudomonas aeruginosa	25619	50-100	Luxuriant	>=70%	Carbenicillin		36-37.5°C	18-24 Hours
Staphylococcus epidermidis	12228	50-100	Luxuriant	>=70%	Gentamicin, Netilmicin, Neomycin, Novobiocin, Paromomycin, Sisomicin	Novobiocin	32-35°C	18-24 Hours



 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Buckstraße 10 48163 Münster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.
*For LabUse Only

