CM 20137 – ANTIBIOTIC ASSAY MEDIUM NO. 40

INTENDED USE

Formicrobiological assay of Thiostrepton using Streptococcus faecium (Enterococcus faecium).

PRODUCT SUMMARY AND EXPLANATION

Thismedium is usedasmaintenancemediumfor test organism Enterococcus hirae ATCC 10541 used for assay of Thiostrepton. It is recommended by USP.

COMPOSITION

Ingredients	Gms / Ltr
Yeast extract	20.000
Peptone	2.500
Tryptone	2.500
Dextrose (Glucose)	10.000
Potassium dihydrogen phosphate	2.000
Polysorbate 80 (Tween 80)	0.100
Agar	10.000

PRINCIPLE

Essential amino acids, mineral and growth factors are supplied by Peptone, Tryptone and yeast extract in this medium. Dextrose functions as carbon and energy source for enhancing the growth of test organism. During maintenance of the test organims, good buffering action is maintained by phosphates in the medium. Incorporation of polysorbates reduces the surface tension, maintaining uniform suspension of cells and also can neutralize phenolic compounds in the test sample, if any.

INSTRUCTION FOR USE

Dissolve 47.1gramsin 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. Cool to 45-50°C.
Mix well and pour into sterile Petri plates or as desired.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light amber coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 6.7±0.2

INTERPRETATION

Culturalcharacteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Antibiotics assayed	Incubation Temperature	Incubation Period

Enterococcus hirae	10541	50-100	Luxuriant	>=70%	Thiostrepton	35-37°C	18-24 Hours

PACKAGING:

Inpacksizeof500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

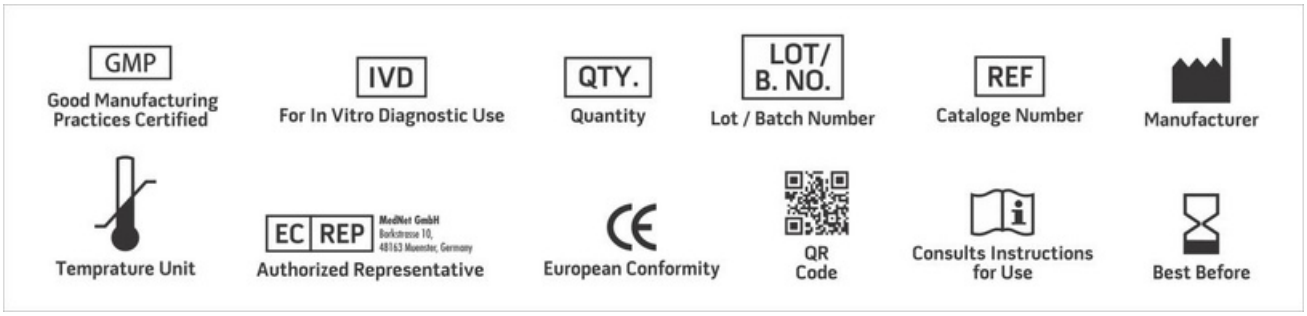
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

Afteruse,prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Editi
2. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L.,Richter, S.S and Warnock., D.W. (2015) Manual Clinical Microbiology, 11th Edition. Vol. 1.
3. United States Pharmacopoeia 2019,US Pharmacopoeial Convention, Inc., Rockville, MD.



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

*For LabUse Only