CM 20,094 – ANTIBIOTIC ASSAY MEDIUM L - AOAC

INTENDED USE

Formicrobiological assay of Monensin using Bacillus subtilis.

PRODUCT SUMMARYANDEXPLANATION

AntibioticAssay Medium L is formulatedin accordance with AOAC for the microbiological assay of Monensin in feeds, using Bacillus subtilis as the test organism. Use single inoculated agar layer. Optimum concentration of suspension of Bacillus subtilis, is determined before assay by preparing trial plates. Usually 0.5 ml suspension is used per 100 ml of seed agar, to obtain appropriate inhibition zones (17.5± 2.5 mm with 0.5µg/ml). For actual assay add appropriate amount of suspension to sterile, molten medium, mix and pour 6 ml into sterile Petri plate.

COMPOSITION

Ingredients	Gms / Ltr
Dipotassium hydrogen phosphate	0.690
Potassium dihydrogen phosphate	0.450
Yeast extract	2.500
Dextrose (Glucose)	10.000
Agar	15.000

PRINCIPLE

For thestandard graph or response lines prepare dilution using 50% methanol to obtain 0.25, 0.5, 1.0 and 2.0 µg monensin/ ml. Reference concentration is 0.5 µg/ml. To obtain standard curve 10 seeded agar plates are used placed with cylinders. Different standard concentrations are filled in it.

INSTRUCTION FOR USE

Dissolve 28.64 gramsin 1000 ml distilled water.
Heat to boiling to dissolve the medium completely.
Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
Cool to 45-50°C. Mix well and pour into sterile Petri plates.

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)	: 6.0±0.2

INTERPRETATION

Culturalcharacteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Antibiotic Assay	Incubation Temperature	Incubation Period

Bacillus subtilis subsp. spizizenii	6633	50-100	Luxuriant	>=70%	Inhibition zones with Monensin	35 - 37°C	16 - 18 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.

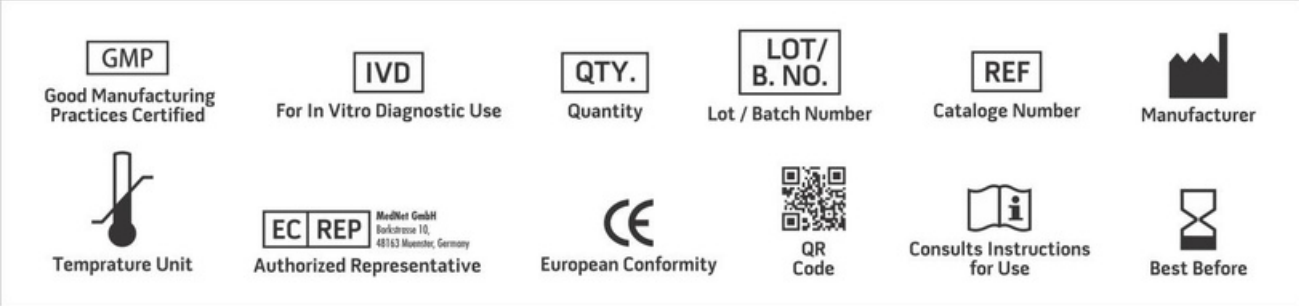
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1.Williams.(Ed.),2005, Official Methods of Analysis of AOAC International, 19th ed., AOAC, International, Washington D. C.



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

*For LabUse Only