CM 20432 – CHROMOGENIC CLOSTRIDIAL AGAR BASE

INTENDED USE

For selective isolation and presumptive identification of Clostridium species.

PRODUCT SUMMARY AND EXPLANATION

Oneof the major species ofanaerobic bacteria to cause disease in humans is Clostridium. Clostridium species cause tetanus and gas gangrene that ultimately leads to tissue damage. Another Clostridium species produces the lethal botulinum toxin, the causative agent of botulism. Clostridial Agar formulated by Vera is recommended for the selective isolation of pathogenic Clostridia form mixed flora. Chromogenic is the modification for chromogenic differentiation.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	15.000
Yeast extract	10.000
Dextrose	1.000
Sodium chloride	5.000
Sodium thioglycollate	0.500
Chromogenic mixture	3.310
Agar	13.000

PRINCIPLE

Tryptone and yeast extract provide the essential nutrients, mainly the nitrogen compounds. Dextrose serves as the carbon or fermentable carbohydrate source. Sodium thioglycollate is the reducing agents that help to create low oxidation-reduction potential enabling the growth of Clostridia. Also the media is well supplemented to support luxuriant growth of Clostridium species. The selective supplements inhibits other enteric bacteria.

The ideal method of inoculation of Clostridial Agar is direct inoculation of sterile, cooled medium with the specimen (in tubes). Alternatively agar plates of the medium can also be inoculated by streaking.

INSTRUCTIONFOR USE

Dissolve 47.81 grams in 1000 ml distilled water.
Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE.
Cool to 45-50°C.
Aseptically add rehydrated contents of one vial of PERFRINGEN'S T.S.C.SUPPLEMENT (TS 076).
Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to beige homogeneous free flowing powder

Appearance of prepared medium : Yellow coloured, clear to slightly opalescent gel forms in Petri plates

pH (at 25°C) : 7.1 ± 0.2

INTERPRETATION

Culturalcharacteristics observed after incubation (under anaerobic condition).

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Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Color of the colony	Incubation Temperature	Incubation Period
Clostridium perfringens	13124	50-100	luxuriant	>= 50%	Pale yellowish green	35-37°C	24-48 Hours
Clostridium sporogenes	11437	50-100	luxuriant	>= 50%	Pale green-bluish green	35-37°C	24-48 Hours
Clostridium sporogenes	19404	50-100	luxuriant	>= 50%	Pale green-bluish green	35-37°C	24-48 Hours
Staphylococcus aureus	25923	>=10^3	Inhibited	0%		35-37°C	24-48 Hours
Escherichia coli	25922	>=10^3	Inhibited	0%		35-37°C	24-48 Hours

PACKAGING:

Inpacksizeof100 gm and 500gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 2-8°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. AlcamoE.I., 2001, Fundamentals of Microbiology, 6th Ed., Jones and Bartlett Publishers.
2. Vera, 1962, Presented Pa. Soc. Med. Tech., York, Pa.

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

*For Lab Use Only