CM 22532 - CLED AGAR W/ BROMOTHYMOL BLUE PLATE

INTENDED USE
For isolation and differentiation of urinary pathogens on the basis of lactose fermentation.

PRODUCT SUMMARY AND EXPLANATION
Onasolid medium, Sandys reported thatswarming of *Proteus* species can be controlled by restricting the electrolytes. Formerly swarming of *Proteus* was controlledby adding alcohol, surface-active agent, sodium azide, boric acid etc. to the medium. Later on, Sandys medium was modified by Mackey and Sandys, by replacing mannitol with lactose and sucrose and elevating concentration of agar and bromothymol blue. This formulation was further modified by the same authors, called C.L.E.D. (Cystine-Lactose-Electrolyte-Deficient) by deleting the sucrose and including L-cystine for promoting the growth of cystine dependent dwarf colony coliforms. This medium is recommended for use in urinary bacteriology, promoting the growth of all urinary pathogens.

COMPOSITION

Ingredients	Gms / Ltr
Agar	15.000
Lactose	10.000
Peptic digest of animal tissue	4.000
Casein enzymatic hydrolysate	4.000
Beef extract	3.000
L-Cystine	0.128
Bromothymol blue	0.020

PRINCIPLE
Peptic digest of animal tissue,beef extract, casein enzymatic hydrolysate provides essential growth nutrients. Lactose is included to provide an energysource for organisms capable of utilizing it by a fermentative mechanism. Bromothymol blue is used as a pH indicatortodifferentiate lactose fermenters from lactose-non fermenters. Organisms which ferment lactose will lower the pHandchange the color of the medium from green to yellow. The L-cystine permits the growth of "dwarf colony" coliforms.

INSTRUCTION FOR USE
Eitherstreak,inoculateorsurface spread the test inoculum aseptically on the plate.

QUALITY CONTROL SPECIFICATIONS

Appearance	:	Green colour medium
Quantity of Medium	:	25ml of medium in 90mm plates.
pH (at 25°C)	:	7.3± 0.2
Sterility Check	:	Passes release criteria

INTERPRETATION
Culturalcharacteristics observed after incubation**.**

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Appearance of colony	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	Luxuriant	>=70%	Yellow, opaque, centre slightly deeper yellow	35-37°C	18-24 Hours
Staphylococcus aureus	25923	50-100	Luxuriant	>=70%	Deep yellow Blue	35-37° C	18-24 Hours
Proteus vulgaris	13315	50-100	Luxuriant	>=70%	Blue	35-37°C	18-24 Hours
Salmonella typhi	6539	50-100	Luxuriant	>=70%	Slight yellow	35-37°C	18-24 Hours
Enterococcus faecalis	29212	50-100	Luxuriant	>=70%	or green Yellow to whitish blue	35-37°C	18-24 Hours
Klebsiella pneumoniae	13883	50-100	Luxuriant	>=70%		35-37°C	18-24 Hours

PACKAGING:

Doubledlayered packing containing 5 No. of plates with one silica gel desiccant bag packed inside it.

STORAGE

On receipt,store the plates at 15–30 °C. Avoid freezing and overheating. Do not open until ready to use. Prepared plates stored in their original sleeve wrapping until just prior to use may be inoculated up to the expiration date and incubated for recommended incubation times. Allow the medium to warm to room temperature before inoculation.

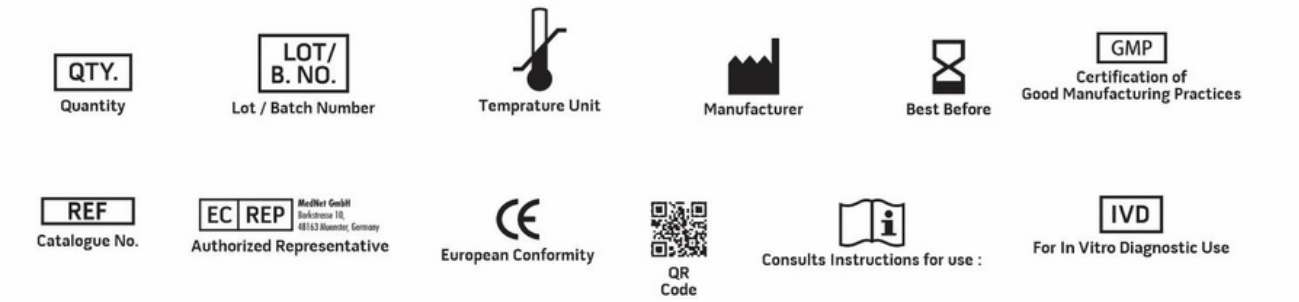
Product Deterioration: Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Sandys, 1960, J.Med. Lab. Technol., 17:224.
2. Mackey and Sandys, 1965, Br. Med. J., 2:1286.
3. MacKey and Sandys, 1966, Br. Med. J., 1:1173.
4. Dixson J. M. S. and Clark M. A., 1968, Conc. Med. Assoc. J., 99 (15).
5. Benner E. J., 1970,, Appl. Microbiol., 19(3), 409.
6. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore



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