CM 20472 - CHROMOGENICUTIAGAR,MODIFIED

INTENDED USE

For enumeration and differentiation of enteric pathogens in urinary tract infections.

PRODUCT SUMMARY AND EXPLANATION

Chromogenic UTI Agar,Modified is formulatedonthe basis of work carried out by Pezzlo, Wilkie et al, Friedman et al, Murray et al, Soriano and Ponte & Merlino etal.This medium is the modification of Chromogenic UTI Agar, which can be used in place of MacConkey Agarforisolation and confirmation of various microorganisms. It facilitates and expedites the identification of some gram-negativebacteria and some gram-positive bacteria on the basis of different contrasted colony colours produced by reactionsofgenus or species specific enzymes with two chromogenic substrates.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	18.000
Agar	15.000
Chromogenic mixture	12.440
Meat extract	6.000
Tryptone	4.000

PRINCIPLE

Presenceof rich source ofphenylalanine and tryptophan from peptone and tryptone provides an indication of tryptophan deaminase activity, revealedwith TDA Reagent indicating the presence of Proteus species, Morganella species and Providencia species, whichappear brown. One chromogenic substrate is cleaved by ß-glucosidase possessed by Enterococci resulting information of blue colonies. E. coli produce purple-magenta colonies due to the enzyme ß-D-galactosidase which cleavesthe other chromogenic substrate. Further confirmation of E. coli can be done by performing indole test using DMACAReagent (TS 207). Also, some strains of Enterobacter cloacae lacking ß-glucosidase show pink-colonies indistinguishablefrom E. coli. The DMACA reagent for indole test (should be performed on filter paper) distinguishes between E.coliand Enterobacter, and also between Proteus mirabilis and other species. Coliforms produce purple colour colonies duetocleavage of both the chromogenic substrates. Peptone, Meat extract and tryptone provides nitrogenous, carbonaceouscompounds and other essential growth nutrients.

INSTRUCTION FOR USE

Dissolve 55.44 gramsin1000 ml distilled water.
Gently heat to boilingwith swirling to dissolve the medium completely.
Sterilize by autoclavingat 15 psi (121°C) for 15 minutes.
Cool to 45-50°C.
Mix well and pour intosterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	:	Cream to yellow colour, homogeneous free flowing powder
Appearance of prepared medium	:	Light amber colour, clear to slightly opalescent gel
pH (at 25°C)	:	7.2± 0.2

INTERPRETATION

Culture characteristics observed after incubation. Recovery rate is considered 100% for bacteria growth on Soya Agar.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Colour of colony	Recovery	Reaction with TDA reagent	Reaction with DMACA reagent	Incub.* Temp	Incub.* period
Escherichia coli	25922	50-100	Luxuriant	Pink-purple colonies	>=70%	Negative reaction	Positive reaction#	35 ± 2°C	18-24 Hours
Enterococcus faecalis	29212	50-100	Luxuriant	Small blue colonies	>=70%	Negative reaction	Negative reaction	35 ± 2°C	18-24 Hours
Klebsiella pneumoniae	13883	50-100	Luxuriant	blue to purple, mucoid	>=70%	Negative reaction	Negative reaction	35 ± 2°C	18-24 Hours
Proteus mirabilis	12453	50-100	luxuriant	light brown	>=70%	Positive reaction##	Negative reaction	35 ± 2°C	18-24 Hours
Pseudomonas aeruginosa	27853	50-100	luxuriant	colourless (slightly green pigment may be observed)	>=70%	Negative reaction	Negative reaction	35 ± 2°C	18-24 Hours
Staphylococcus aureus	25923	50-100	luxuriant	golden yellow	>=70%	Negative reaction	Negative reaction	35 ± 2°C	18-24 Hours

= Formationofblue purple colour around growth
= Development of brown colouration
Incub*=Incubation

PACKAGING

Inpacksizeof100gm & 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 powder 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

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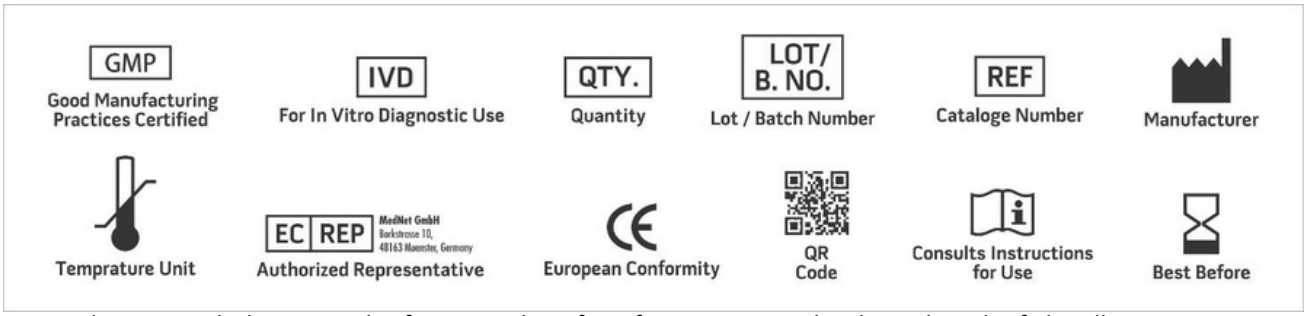

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*ForLab Use Only