CM 22499 - UREA INDOLE MEDIUM

INTENDED USE

Fordifferentiation of microorganism especially Enterobacteriaceae on the basis of their ability to hydrolyze urea and indole production.

PRODUCT SUMMARY AND EXPLANATION

Strainsof *Enterobacteria* are associated withabscesses, pneumonia, meningitis, septicemia and infections of wounds, the urinary tract and the intestine. They are amajor component of the normal intestinal flora of humans but are relatively uncommon at other body sites. Of clinicallysignificant isolates, *Enterobacteriaceae* may account for 80% of gram-negative bacilli and 50% of all clinically significant isolates in clinical microbiology laboratories.
Urea Indole Medium is used for the identification of *Enterobacteria* on the basis of Urease and indole production and the transdeamination of tryptophan. This medium is very useful in the identification of *Proteus* species from *Salmonella* and *Shigella* species. The results for urease production should be noted prior to indole reaction, as addition of Kovacs reagent, decolourizes the medium, due to drop in pH.

COMPOSITION

Ingredients	Gms / Ltr
L- Tryptophan	3.000
Sodium chloride	5.000
Potassium phosphate, monobasic	1.000
Potassium phosphate, dibasic	1.000
Urea	20.000
Phenol red	0.012

PRINCIPLE

L-Trypytophan is an essential amino acid and is converted to skatole and indole, which is detected by the addition of Kovacs Reagent. Sodiumchloride maintains the osmotic balance. The phosphates help in the buffering of the medium. Microorganisms that possess the enzyme urease hydrolyse urea, releasing ammonia, which is detected by the pH indicator phenol red. Thealkalinility so developed imparts pink colour to the medium.

INSTRUCTION FOR USE

InoculatethesampleandIncubateatspecified temperature and time.

QUALITY CONTROL SPECIFICATION

Appearance ofpreparedmedium	:	Yellow to light orange coloured clear solution
Quantity of Medium	:	10 ml of medium in tubes.
pH (at 25°C)	:	6.8 ± 0.2
Sterility Check	:	Passes release criteria

INTERPRETATION

Culturalcharacteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Urease	Incubation Temperature	Incubation Period

Escherichia coli	25922	50-100	luxuriant	Negative reaction, no change	35-37°C	18-24 Hours
Proteus mirabilis	*12453*	50-100	luxuriant	Positive reaction, Pink colour	35-37°C	18-24 Hours
Proteus vulgaris	*13315*	50-100	luxuriant	Positive reaction, Pink colour	35-37°C	18-24 Hours
Salmonella Typhimurium	*14028*	50-100	luxuriant	Negative reaction, no change	35-37°C	18-24 Hours

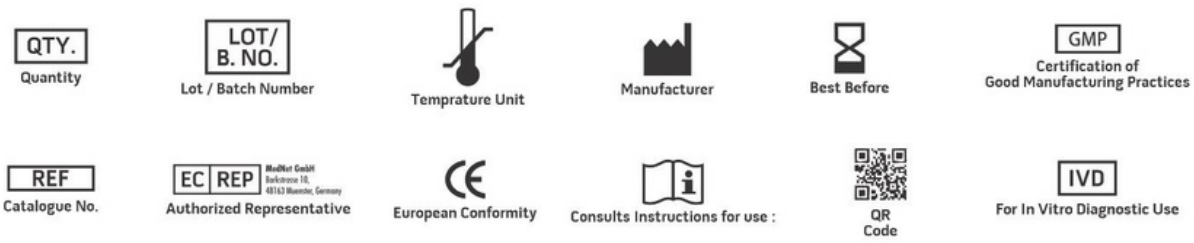
PACKAGING:
Pack of 25 Ready-To-Use Liquid Medium tubes containing 10 ml in each tube.
Pack of 50 Ready-To-Use Liquid Medium tubes containing 10 ml in each tube.

STORAGE
Onreceipt, store tubes in the dark at 10-25°C. Avoid freezing and overheating. Do not open until ready to use. Minimize exposure to light. Tubed media stored as labeled until just prior to use may be inoculated up to the expiration date and incubated for the recommended incubation times. Allow the medium to warm to room temperature before inoculation.

DISPOSAL
Usermustensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques.

REFERENCES

1. Patrick R. Murray et al, Manual of Clinical Microbiology, Sixth Edition, 444 - 445.
2. Roland F. Bourbon D, Sztrum S. Ann. Inst. Pasteur, 73. 914-916.



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

***For LabUse Only**