LICKSON®

CE

TECHNICAL SHEET

URINE CHROMOGENIC AGAR

IVD in Class A, EU Reg. 2017/746
For in vitro diagnostic use **IVD**

DESCRIPTION
Urine Chromogeic Agar is a nonselective medium for the isolation, direct identification, differentiation and enumeration of urinary tract pathogens.

PRINCIPLE
The most frequently isolated species or organism groups produce characteristic enzymes. Thus, it is possible to identify these organisms to the species level with a limited number of substrate fermentation or utilization tests.
Some of the organisms involved produce enzymes either for the metabolism of lactose or glucosides or both, whereas others produce none of these enzymes. As an example, E. coli produces enzymes of the lactose metabolism but is ß-glucosidase negative. Other members of the family Enterobacteriaceae are ß-glucosidase positive but do not contain enzymes necessary for lactose fermentation, and others may contain both types of enzymes or none of them. Betaglucosidases are also found in Gram positive cocci such as Enterococcus spp. and Streptococcus agalactiae. Tryptophan deaminase (TDA) is an enzyme characteristically found in the Proteus-Morganella-Providencia group of organisms. In Urine Chromogenic Agar, specially selected peptones supply the nutrients. The chromogen mix consists of artificial substrates (chromogens) which release differently colored compounds upon degradation by specific microbial enzymes, thus assuring the direct differentiation of certain species or the detection of certain groups of organisms, with only a minimum of confirmatory tests.

COMPOSITION	g/L
Mix Peptone	16.0
Tryptophane	2.0
Growth factors	13.0
Chromogenic substrate	0.5
Agar	16.0

Final pH 7,2 ± 0,2 at 25°C

WARNING AND PRECAUTIONS
For in vitro diagnostic use.
Observe the precautions normally taken when handling laboratory reagents.
Dehydrated medium: HIGHLY HYGROSCOPIC. During the handling, wear dust protection mask. Avoid the eye contact. Do not use beyond the expiration date or if the product shows signs of deterioration, an altered color or has compacted.
Prepared Medium: The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous.
Safety Data Sheet is available on request for professional users.
All wast must be disposed of according to local directives.

STORAGE AND STABILITY	
Dehydrated medium:	2-8°C
Prepared medium:	2-8°C

URINE CHROMOGENIC AGAR is stable until the expiration date indicated on the label under the recommended storage conditions.

PREPARATION
Dehydrated medium: Suspend 47,5 g of the powder in 1 liter of distilled or deionized water. Mix thoroughly to completely dissolve the powder. Autoclave at 121°C for 15 minutes. Cool to 45-50°C. Aseptically dispense in Petri dishes on a level, horizontal surface to give a uniform depth of about 4 mm and cool to room temperature.
Prepared medium (bottles): Melt the content of the bottle in a water bath at 100°C until completely dissolved. Then screw the cap and check the homogeneity of the dissolved medium, if it is the case turning the bottle upside down. Cool at 45-50°C, mix well avoiding foam formation and aseptically distribute into Petri dishes.
Prepared medium (plates): ready to use.

PROCEDURE
Use of calibrated loops or other techniques commonly used for the plating of urine specimens is mandatory to obtain isolated colonies with their typical colors and shapes. Collect a sample of the undiluted, well-mixed urine using a calibrated loop (0.01 or 0.001 ml). Ensure proper loading of the loop with the specimen. Inoculate the sample down the middle of the plate in a single streak from which additional spreading of the inoculum is performed. Incubate the inoculated plates in an inverted position at 35 to 37° C aerobically for 20 to 24 hours.

RESULTS

MICRORGANISM	COLONY COLORS
E. coli	Pink
Enterobacter aerogenes	Dark Blue
Klesiella pneumoniae	Dark Blue
Proteus mirabilis	Brown
Enterococcus faecalis	Light Blue (turquoise)
Staphylococcus aureus	White-cream

QUALITY CONTROL
Dehydrated medium: fine, dry, homogeneous, free of extraneous material, beige
Prepared medium: slightly opalescent, amber.

Typical response after incubation at 35±2°C for 18-24 hours, in aerobiosis

MICROORGANISM	GROWTH/COLONIES
E. coli ATCC 25922	Good/Pink
Enterobacter aerogenes ATCC 13048	Good/Dark Blue
Klebsiella pneumoniae ATCC 13883	Good/Dark Blue
Proteus mirabilis ATCC 13315	Good/Brown
Staphylococcus aureus ATCC 25923	Good/White-cream
Enterococcus faecalis ATCC 19433	Good/Light Blue (turquoise)

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PRESENTATION	Packaging	REF.
Dehydrated medium:		
URINE CHROMOGENIC AGAR	**500 g (10.5 L)**	**10318**
Prepared medium:		
URINE CHROMOGENIC AGAR	**6 x 100 mL bottles**	**63368**
	12 x 200 mL bottles	**63368/12**
	20 pcs (90 mm ready-to-use plates)	**3092802/20**

SYMBOLS

Read the instructions
Biological hazard
CE Mark (product complies with the requirements of Regulation (EU) 746/2017)
Temperature limitation
Use by
For in vitro diagnostic use
Manufacturer