CM 20613 – DRIGALSKI LACTOSE AGAR, MODIFIED

INTENDED USE
For detection and differentiation of enteric pathogens.

PRODUCT SUMMARY AND EXPLANATION
DrigalskiLactoseAgar,Modifiedisbasedontheoriginal medium developed by Drigalski and Conrad for the detection of entericpathogens .

COMPOSITION

Ingredients	Gms / Ltr
Beef extract	4.000
Peptone	10.000
Lactose	10.000
Bromothymol blue	0.040
Agar	16.000

PRINCIPLE
The mediumconsists of Beef extract and peptone which provide nitrogenous nutrients to the organisms, while lactose is the fermentable carbohydrate. Bromothymol blue is the pH indicator in the medium. Non-lactose fermenting (enteric) pathogens form blue to green colonies whereas lactose fermenting coliform organisms form yellow colonies due to acid production and decrease in pH.

INSTRUCTION FOR USE

Dissolve 40.04 gramsin 1000 ml purified/distilled water.
Heat to boiling to dissolve the medium completely.
Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
Mix well and pour into sterile Petri plates. Cool to 45-50°C.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Light yellow to greenish yellow homogeneous free flowing powder, may have slight dye particles.
Appearance of prepared medium	: Green coloured, clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 7.4 ± 0.2

INTERPRETATION
Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period

Klebsiella pneumoniae	13883	50-100	Luxuriant	>=70%	Yellow	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Luxuriant	>=70%	Yellow	35-37°C	18-24 Hours
Salmonella Typhi	6539	50-100	Luxuriant	>=70%	Blue to green	35-37°C	18-24 Hours
Shigella flexneri	12022	50-100	Luxuriant	>=70%	Blue to green	35-37°C	18-24 Hours
Pseudomonas aeruginosa	27853	50-100	Good	40-50%	Blue to green	35-37°C	18-24 Hours

PACKAGING:

Inpacksizeof500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°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.

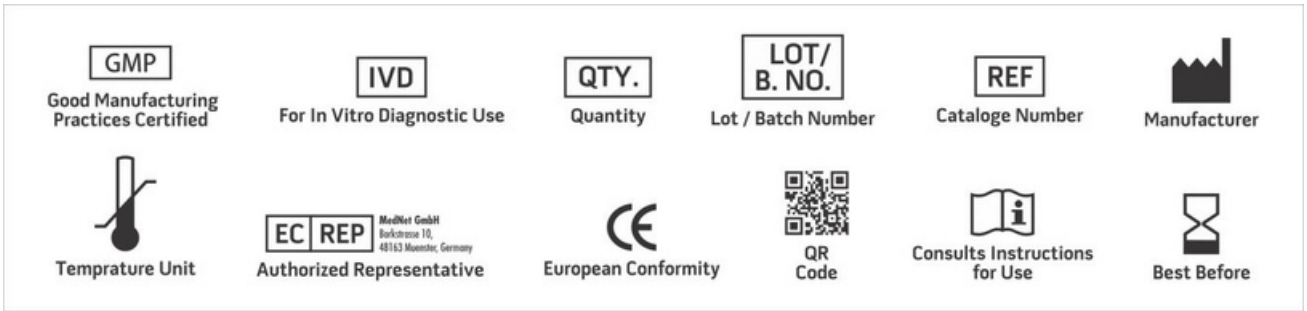
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Drigalski V. and Conrad H., 1902, Z. Hyg. Infektionskr., 39:283
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
4. MacFaddin J., 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.

*ForLabUseOnly