

CM 22318 - MOTILITY INDOLE LYSINE IRON AGAR (10 Butts)

INTENDED USE

For identification of members of Enterobacteriaceae on the basis of motility, lysine decarboxylase, lysine deaminase and indole production

PRODUCT SUMMARY AND EXPLANATION

MIL Medium is prepared as per the formulation of Reller and Merrett. It is a highly useful medium in the identification of Enterobacteriaceae as it provides four differential reactions in a single culture tube. It is recommended to be used along with Triple Sugar Iron Agar (TSI) and Urea Agar so as to enable presumptive identification of members of Enterobacteriaceae from faecal specimens.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	10.000
Tryptone	10.000
L-Lysine hydrochloride	10.000
Yeast extract	3.000
Agar	2.000
Dextrose (Glucose)	1.000
Ferric ammonium citrate	0.500
Bromocresol purple	0.020

PRINCIPLE

Peptone, Tryptone and yeast extract supply amino acids and other complex nitrogenous substances. Dextrose is a source of energy. A small amount of agar is added for demonstration of motility along the stab line of inoculation. Growth of motile organisms extends out from the line of inoculation, while non-motile organisms grow only along the stab line. Bromocresol purple serves as the pH indicator.

INSTRUCTION FOR USE

Inoculate the bacterial culture with an inoculating needle by streaking the slants.

QUALITY CONTROL SPECIFICATIONS

Appearance	:	Reddish purple coloured clear to slightly opalescent gel forms in tubes as butts
Quantity of Medium	:	8ml of medium in glass tube.
pH (at 25°C)	:	6.6±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Motility	Indole production	Lysine Deaminase	Lysine decarboxylase	Incubation Time	Incubation Temperature
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<i>Klebsiella aerogenes</i>	13048	Positive, growth away from stabline	Negative reaction	Negative	Positive reaction, purple colour	35-37°C	18-24 hours
<i>Escherichia coli</i>	25922	Positive, growth away from stabline	Positive, red ring at the interface of the medium on addition of Kovac's reagent	Negative	Positive reaction, purple colour	35-37°C	18-24 hours
<i>Klebsiella pneumoniae</i>	13883	Negative, growth along the stabline	Occasional reaction	Negative	Positive reaction, purple colour	35-37°C	18-24 hours
<i>Proteus mirabilis</i>	25933	Positive, growth away from stabline	Negative reaction	Positive reaction, red-brown colour reaction at the top	Negative reaction	35-37°C	18-24 hours
<i>Proteus vulgaris</i>	13315	Positive, growth away from stabline	Positive reaction, red ring at the interface of the medium on addition of Kovac's reagent	Positive reaction, red-brown colour reaction at the top	Negative reaction	35-37°C	18-24 hours
<i>Salmonella enteritidis</i>	13076	Positive, growth away from stabline	Negative reaction	Negative	Positive reaction, purple colour	35-37°C	18-24 hours
<i>Shigella flexneri</i>	12022	Negative, growth along the stabline	Occasional reaction	Negative	Negative reaction	35-37°C	18-24 hours

PACKAGING:

Kitof10Ready-To-Use Butts containing 8 ml medium in each glass tube.

STORAGE

Onreceipt, store tubes in the dark at 2 – 8°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.

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

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. Ewing W. H., 1986, Edwards and Ewings Identification of Enterobacteriaceae, 4th Ed., Elsevier Science Publishing Co., Inc., New York, N.Y.
2. Forbes B. A, Sahm A. S. and Weissfeld D. F., 1998, Bailey & Scotts Diagnostic Microbiology, 10th Ed., Mosby, Inc., St. Louis, Mo
3. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore.
4. Murray P. R., Baron E. J., Jorgensen J. H., Pfaller M. A., Tenover F. C., Tenover F. C., (Eds.), 8th Ed., 2003, Manual of Clinical Microbiology, ASM, Washington, D.C.
5. Reller L. B. and Mirrett S., 1975, J. Clin. Microbiol., 2:247.



Quantity



Lot / Batch Number



Temperature Unit



Manufacturer



Best Before



Certification of
Good Manufacturing Practices



Catalogue No.



Authorized Representative

Muller GmbH
Barkhausen 13
48143 Münster, Germany



European Conformity



Consults Instructions for use :



For In Vitro Diagnostic Use

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

***For LabUse Only**

