

LIM (Lysine Indole Motility) Semi-Solid



Medium used for the isolation and identification of *Enterobacteria* spp.

*Equally use with MFDS (MB-L1384K) and QIA (MB-L1384Q).

• CONTENTS (Liter)

Peptone	10.0 g
Yeast Extract	3.0 g
Dextrose	3.0 g
Bromocresol Purple	0.02 g
L-Lysine Hydrochloride	10.0 g
L-Tryptophan	0.5 g
Agar	3.0 g
Final pH = 6.7 ± 0.2 at 25°C.	

• PROCEDURE

Suspend 29.52 G of powder in 1L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45-50°C in water bath. Mix well. Dispense in sterilized tube. If necessary, dispense the medium before autoclave.

• INTERPRETATION

LIM (Lysine Indole Motility) Semi-Solid is a medium used for the isolation and identification of *Enterobacteria* spp. by detecting lysine decarboxylation or deamination, motility and indole production. Yeast extract and peptone provide the growth factors necessary for bacterial growth. Dextrose is the source of energy. Bromocresol purple serves as the pH indicator. L-Lysine hydrochloride and L-Tryptophan are amino acids. Agar is the solidifying agent. This medium is single culture medium that provides four differentiated biochemical reaction. Lysine decarboxylation is indicated by color of medium. The medium becomes purple color if the positive reaction. A yellow medium indicated negative reaction. Lysine deamination produces a color change in the top portion of medium. Motility is indicated by a clouding medium. Indole production is indicated by adding Kovac's reagent to the medium surface.

• TECHNIC

Inoculate the tube to stab the middle of the medium using a sterile needle. Incubate at 36 ± 1°C for 18 - 24 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: light beige.

Prepared medium

Appearance : clear.

Color: purple.

Incubation conditions: 36 ± 1°C / 18 - 24 hours

Microorganism	ATCC	Growth	Lysine decarboxylase	Lysine deaminase	Motility	Indole production
<i>Salmonella enteritidis</i>	13076	good	+	-	+	-
<i>Escherichia coli</i>	25922	good	+	-	+	+
<i>Shigella flexneri</i>	12022	good	-	-	-	-
<i>Enterobacter aerogenes</i>	13048	good	+	-	+	-
<i>Klebsiella pneumoniae</i>	27736	good	+	-	-	-
<i>Proteus mirabilis</i>	25933	good	-	+	+	-

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration are evident. Store prepared medium at 2-8°C.

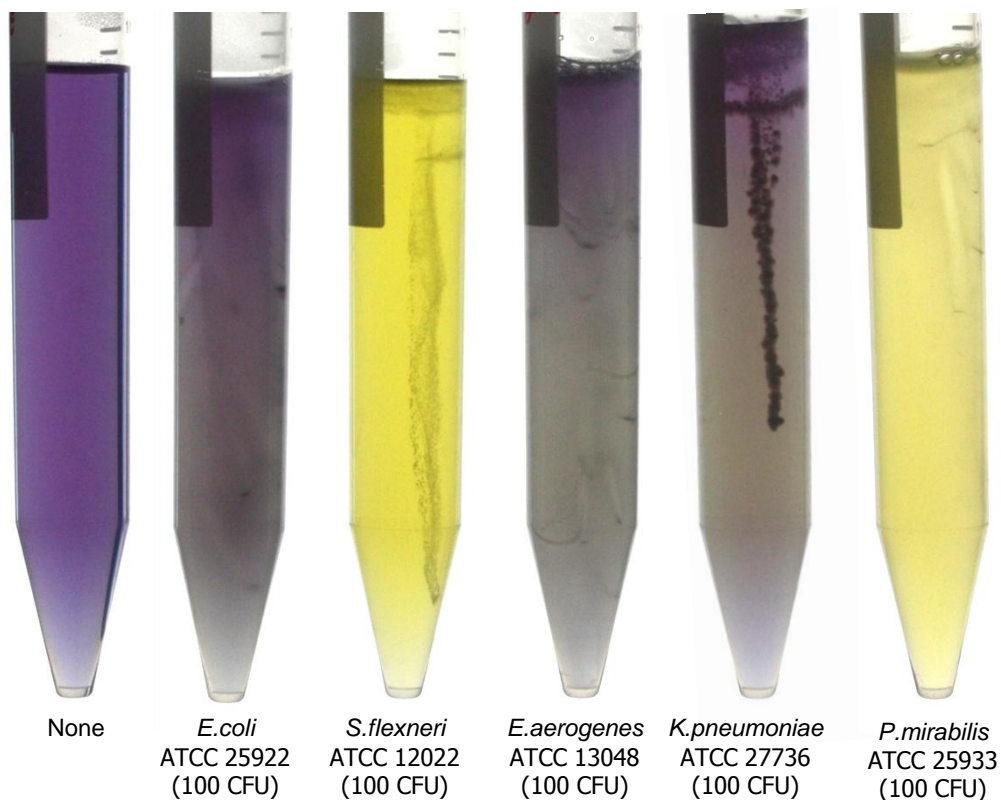
• REFERENCES

1. Reller L. B. and Mirrett S., 1975, J. Clin. Microbiol., 2:247.
2. Ewing W. H., 1986, Edwards and Ewings Identification of Enterobacteriaceae, 4th Ed., Elsevier Science Publishing Co., Inc., New York, N.Y
3. Refer to the MFDS and the QIA.

• PACKAGE

Cat. No : MB-L1384 LIM (Lysine Indole Motility) Semi-Solid	500 G
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• MICROBIAL CULTURE IMAGES



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