

Product Name : Lysine Decarboxylase Broth

Dehydrated medium used for identification of microorganisms, especially *enteric bacilli*, based on the decarboxylation of lysine.

FORMULA (G/L)

Peptone 5.0
Yeast Extract 3.0
Dextrose 1.0
L-Lysine 5.0
Bromcresol Purple 0.02
Final pH = 6.8 ± 0.2 at 25 °C.

DIRECTIONS

Suspend 14.02 G of the powder in 1 L of distilled water. Mix thoroughly. Heat with frequent agitation and boil for 1 minute to completely dissolve the powder. Dispense into final containers. Autoclave at 121 °C for 15 minutes.

EXPLANATION

Lysine Decarboxylase Broth is used to detect and differentiate *Enterobacteria* from other microorganisms, based on lysine decarboxylation.

TECHNIC

Inoculate the broth media by transferring one or two colonies from the surface of a fresh culture with an inoculating loop or needle and mix to distribute the culture throughout the medium. Overlay the medium in each tube with 1 mL sterile mineral oil. Incubate the tubes with caps tightened at 35 ± 2 °C. Examine for growth and decarboxylase reactions after 18-24, 48, 72 and 96 hours before reporting as negative.

USER QUALITY CONTROL

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: light beige.

Prepared medium

Appearance: clear.

Color: purple.

Incubation conditions: overlay the medium with 1mL of sterile mineral oil 35 ± 2 °C / 18-48 hours.

Microorganism	ATCC	Growth	Lysine decarboxylation
<i>Escherichia coli</i>	25922	good	+
<i>Salmonella typhi</i>	6539	good	+
<i>Salmonella paratyphi</i>	9150	good	-
<i>Proteus vulgaris</i>	13315	good	-
<i>Salmonella gallinarum</i>	9240	good	+
<i>Serratia liquifacies</i>	27592	good	(+) slow

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PRECAUTIONS

The product is not classified as hazardous by current legislation and does not contain harmful substances in concentrations of $\geq 1\%$. The product is designed for *In vitro* diagnostic use and must be used only by properly trained operators.

STORAGE

The powder is very hygroscopic: store the powder at 10-30°C, 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 or contamination are evident. Store prepared media at 2-8°C.

REFERENCES

1. Isenberg ed. (1992). Clinical microbiology procedures handbook, vol. 1. American Society for Microbiology, Washington, D.C.
2. Harmon, Kautter, Golden and Rhodehamel. (1995). In FDA bacteriological analytical manual, 8th ed. AOAC International, Gaithersburg, Md.
3. Clesceri, Greenberg and Eaton ed. (1998). Standard methods for the examination of water and wastewater, 20th ed. American Public Health Association, Washington, D.C.
4. Downes and Ito ed. (2001). Compendium of methods for the examination of water and wastewater, 20th ed. American Public Health Association, Washington, D.C.

PACKAGING

Cat. No : MB-L1303 Lysine Decarboxylase Broth	500 G
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