

Mannitol Lysine Brilliant Green Agar



Medium used for the isolation and cultivation of *Salmonella* species other than *Salmonella typhi* and *Salmonella paratyphi A*.

• CONTENTS (Liter)

Peptone	10.0 g
Yeast Extract	5.0 g
Beef Extract	2.0 g
Sodium Chloride	4.0 g
Mannitol	3.0 g
L-Lysine HCl	5.0 g
Sodium Thiosulfate	4.0 g
Ferric Ammonium Citrate	1.0 g
Brilliant Green	0.0125 g
Crystal Violet	0.010 g
Agar	15.0 g
Final pH = 6.8 ± 0.2 at 25°C	

• PROCEDURE

Suspend 49.02 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. DO NOT AUTOCLAVE. Cool to 45 - 50°C in water bath. Mix well. Pour into petri dishes.

• INTERPRETATION

Mannitol Lysine Brilliant Green Agar is a medium used for the isolation and cultivation of *Salmonella* species other than *Salmonella typhi* and *Salmonella paratyphi A*. Peptone, yeast extract and beef extract provide nitrogen, vitamins, minerals and amino acids for growth of microorganisms. Sodium chloride maintains osmotic balance. Mannitol is a fermentable carbohydrate. L-Lysine HCl is the amino acid. Sodium thiosulfate and ferric ammonium citrate are components of H₂S indicator system. Brilliant green and crystal violet are selective agents for inhibition of Gram-positive bacteria and coliforms. Agar is the solidifying agent.

• TECHNIC

Inoculate the plates with spreading the specimen on surface of the medium using a sterile loop. Incubate at 36 ± 1°C for 18 - 48 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: greenish-beige

Prepared medium

Appearance : clear to slightly opalescent

Color: light blue

Incubation conditions: 36 ± 1°C / 18 - 48 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Salmonella typhimurium</i>	14028	50-100	good	purple colonies with black center
<i>Salmonella enteritidis</i>	31194	50-100	good	purple colonies with black center
<i>Escherichia coli</i>	25922	≥10 ³	partially inhibited	-
<i>Enterococcus faecalis</i>	29212	≥10 ³	inhibited	-
<i>Staphylococcus aureus</i>	25923	≥10 ³	inhibited	-

• 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. Takao Inoue et al. (1968) Proceedings of the Japanese Society of Veterinary Science. Jap. J. Vet. Sci. 30.
2. Aspinall S.T., Hindle M.A. and Hutchinson D.N.(1992) Eur. J. Clin. Microbiol. Inf. Dis. 11:936

• PACKAGE

Cat. No : MB-M2204 Mannitol Lysine Brilliant Green Agar	500 G
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