

MM0035

Lactose Broth

Use and description:

Pre-enrichment broth for *Salmonella* species, recommended by U.S.P. in the presumptive test of coliform organisms. Lactose fermentation is shown by gas formation in Durham fermentation tubes.

Composition per liter:

Lactose.....5.0 g
Meat extract.....3.0 g
Peptone.....5.0 g

Final pH of the ready to use medium: 6.9 ± 0.2

Medium preparation:

Add 13.0 grams of dehydrated culture medium to 1 liter of distilled water. Mix thoroughly. Distribute into tubes containing an inverted Durham tube and autoclave for 15 min at 121°C.

Inoculum	Amount of Medium in tube	Lactose Broth used per 1L
1 ml	10 ml or more	13.0 g
10 ml	20 ml	19.5 g
10 ml	10 ml	26.0 g
100 ml	20 ml	78.0 g
100 ml	50 ml	39.0 g

Quality specifications:

Dehydrated medium: homogeneous, light beige fine powder.

Ready to use medium: light yellow and clear broth.

Microbiological response:

Organism	Result / gas production
<i>Proteus mirabilis</i> ATCC 12453	Growth / -
<i>Salmonella typhimurium</i> ATCC 14028	Growth / -
<i>Pseudomonas aeruginosa</i> ATCC 27853	Growth / -
<i>Enterococcus faecalis</i> ATCC 29212	Growth / -
<i>Enterobacter aerogenes</i> ATCC 13048	Growth / +
<i>Escherichia coli</i> ATCC 25922	Growth / +

Storage:

Dehydrated medium should be stored between 10 to 25°C. Once opened, place the container in a dark, dry place. The dehydrated medium should not be used if there is any lump or the color has changed from the original.