

# Malonate Broth



Medium used for the differentiation of *Enterobacter* from *Escherichia* based on malonate utilization.

## • CONTENTS (Liter)

Ammonium Sulfate	2.0 g
Dipotassium Phosphate	0.6 g
Monopotassium Phosphate	0.4 g
Sodium Chloride	2.0 g
Sodium Malonate	3.0 g
Bromothymol Blue	0.025 g
Final pH = 6.7 ± 0.2 at 25°C.	

## • PROCEDURE

Suspend 8.0 G of powder in 1 L 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 tubes. Avoid introducing extraneous carbon and nitrogen.

## • INTERPRETATION

Malonate Broth is a medium used for the differentiation of *Enterobacter* from *Escherichia* based on malonate utilization. Ammonium sulfate provides nitrogen source. Sodium malonate provides carbon source. Dipotassium phosphate and monopotassium phosphate are the buffering agents. Sodium chloride maintains the osmotic balance. Bromothymol blue is pH indicator.

## • TECHNIC

Inoculate the specimen with stab using a sterile needle to the medium. Shake gently for spreading microorganism. Incubate at 35 ± 2°C for 18 - 48 hours. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: light green.

### Prepared medium

Appearance: clear.

Color: green.

Incubation conditions: 35 ± 2°C / 18 - 48 hours

Microorganism	ATCC	Growth	Characteristics
<i>Escherichia coli</i>	25922	poor to fair	green
<i>Salmonella typhimurium</i>	14028	poor to fair	green
<i>Enterobacter aerogenes</i>	13048	good	blue
<i>Klebsiella pneumoniae</i>	13883	good	blue

## • 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 or contamination are evident. Store prepared medium at 2-8°C.

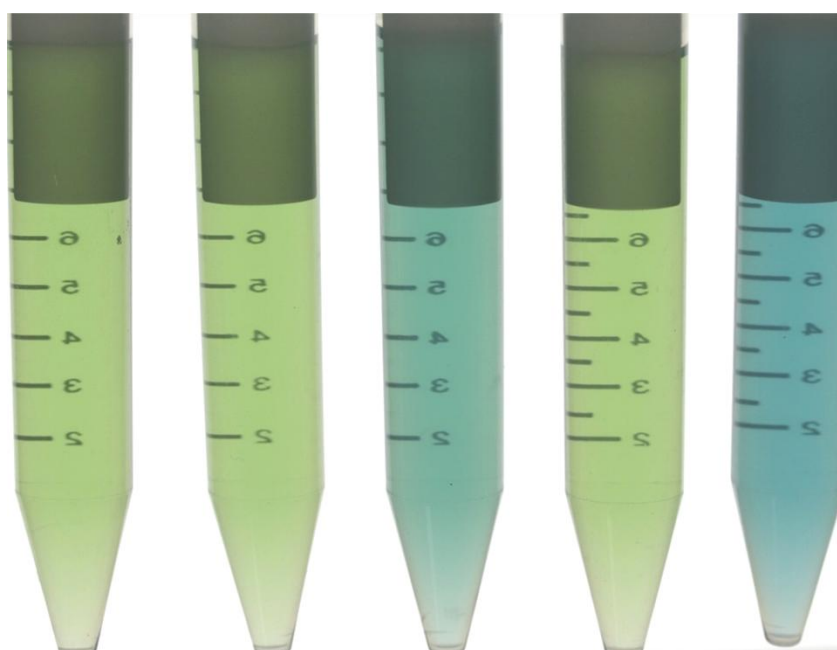
## • REFERENCES

1. Leifson, E. (1933). J. Bacteriol. 26: 329.
2. Bacteriological Analytical Manual. (1995). 8th AOAC International. Gaithersburg, MD.

## • PACKAGE

Cat. No : MB-M1172 Malonate Broth	500 G
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## • MICROBIAL CULTURE IMAGES



None

*E. coli*  
ATCC 25922*k. pneumoniae*  
ATCC 27736*S. typhimurium*  
ATCC 14028*E. aerogenes*  
ATCC 13048

Incubation conditions : 36°C, 18-48h