Malonate Agar



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
Agar	3.0 g

Final pH = 6.7 ± 0.2 at 25° C.

PROCEDURE

Suspend 11.0 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 Agar 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. Agar is the solidifying agent.

TECHNIC

Inoculate the tube to stab the bottom and spreading the specimen on the slant surface using a sterile needle. Incubate at 35 \pm 2°C for 18 - 48 hours. Refer appropriate references for recommended test procedure.

QUALITY CONTROL FOR USE

<u>Dehydrated medium</u>

Appearance: free-flowing, homogeneous.

Color: light green.

Prepared medium

Appearance: clear.

Color: green.

Incubation conditions: $35 \pm 2 \,^{\circ}\text{C} / 18 - 48 \text{ hours}$

Microorganism	ATCC	Growth	Characteristics
Escherichia coli	25922	poor to fair	green
Salmonella typhimurium	14028	poor to fair	green
Enterobacter aerogenes	13048	good	blue
Klebsiella pneumoniae	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.

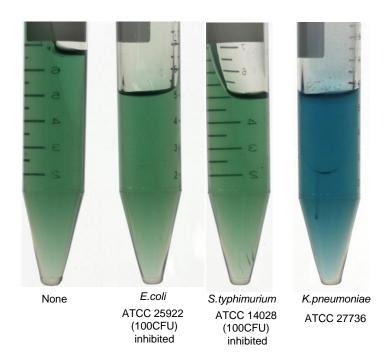
REFERENCES

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

PACKAGE

Cat. No : MB-M2203	500 G
Malonate Agar	

MICROBIAL CULTURE IMAGES



Incubation conditions : 35±2℃ 48h

