

KOSER Citrate Broth



Medium used for the differentiation and isolation of Enterobacter based on citrate utilization.

• CONTENTS (Liter)

Sodium Ammonium Phosphate	1.5 g
Monopotassium Phosphate	1.0 g
Magnesium Sulfate	0.2 g
Sodium Citrate	3.0 g
Final pH = 6.7 ± 0.2 at 25°C.	

• PROCEDURE

Suspend 5.7 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.

• INTERPRETATION

KOSER Citrate Broth is a medium used for the differentiation and isolation of Enterobacter on the basis of citrate utilization. Sodium ammonium phosphate and magnesium sulfate provide essential ions for growth. Monopotassium phosphate is a buffer. Enterobacter use sodium citrate as a source of carbon, but *Escherichia coli* does not, so it cannot grow in the medium.

• 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 - 24 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: white.

Prepared medium

Appearance: clear to slightly opalescent.

Color: colorless.

Incubation conditions: 35 ± 2°C / 18 - 24 hours

Microorganism	ATCC	Inoculum CFU	Growth
<i>Enterobacter aerogenes</i>	13048	50-100	good
<i>Enterobacter agglomerans</i>	27987	50-100	good
<i>Enterobacter cloacae</i>	7256	50-100	good
<i>Enterococcus faecalis</i>	29212	≥10 ³	inhibited
<i>Escherichia coli</i>	25922	≥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 or contamination are evident. Store prepared medium at 2-8°C.

• REFERENCES

1. Bowers and Hucker. 1935. Tech. Bull. 228. New York State Agr. Exp. Sta., Geneva, N.Y.
2. Proc. 36th Cong. Intern. Assoc. Ice Cream Manufacturers. 1936. 2:132.
3. Dennis and Weiser. 1937. J. Dairy Science 20:445.

• PACKAGE

Cat. No : MB-K1165 KOSER Citrate Broth	500 G
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• MICROBIAL CULTURE IMAGES



None

E.aerogenes
ATCC 13048*E.agglomerans*
ATCC 27987*E.cloacae*
ATCC 7256*E.faecalis*
ATCC 29212*E.coli*
ATCC
25922*S.aureus*
ATCC 25923

Incubation conditions : 35 ± 2°C 18 - 24h