

Fluoro MacConkey Broth, Purple



Medium used for the detection of coliform bacteria by a fluorogenic procedure.

• CONTENTS (Liter)

Peptone	20.0 g
Lactose	10.0 g
Bile Salts No.3	5.0 g
Sodium Chloride	5.0 g
Bromocresol Purple	0.01 g
MUG	0.1 g
Final pH = 7.1 ± 0.2 at 25°C.	

• PROCEDURE

Suspend 40.11 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 into final containers provided with durham tubes.

• INTERPRETATION

Fluoro MacConkey Broth, Purple is a medium for the detection of coliform bacteria by a fluorogenic procedure. Peptone provides nitrogen, carbon, vitamins and minerals. Lactose is the carbohydrate source. Bile salt No.3 inhibits the growth of gram-positive organisms. Sodium chloride maintains the osmotic balance. Bromocresol purple is the pH indicator. MUG(4-methylumbellifery-β-D-glucuronide) is cleaved by enzyme glucuronidase and the hydrolysis product 4-methylumbelliferone is detectable under long-wave ultra-violet light (366nm).

• TECHNIC

Inoculate the specimen with stab using a sterile needle to the medium. Shake gently for spreading microorganism. Incubate at 35 ± 2°C for 24 - 48 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: light beige.

Prepared medium

Appearance: clear.

Color: purple.

Incubation conditions: 35 ± 2°C / 24 - 48 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristic	Gas	Fluorescence
<i>Pseudomonas aeruginosa</i>	27853	50-100	good	purple	negative	negative
<i>Escherichia coli</i>	25922	50-100	good	yellow	positive	positive
<i>Staphylococcus aureus</i>	25923	≥10 ³	inhibited			negative
<i>Enterococcus faecalis</i>	25212	≥10 ³	inhibited			negative
<i>Proteus mirabilis</i>	25933	50-100	good	purple	negative	negative

• 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. MacConkey. 1901. Zentralbl. Bakteriol. 29:740.
2. MacConkey A. T., 1905, J. Hyg. 5: 333. Revision.
3. Childs and Allen. 1953. J. Hyg. Camb. 51:468.

• PACKAGE

Cat. No : MB-F1171 Fluoro MacConkey Broth, Purple	500 G
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