

MM0158

MacConkey Agar Without Salt

Use and description:

This is a modified MacConkey medium. By electrolyte deficiency due to the lack of NaCl, swarming of *Proteus* species is suppressed. The medium has improved recovery of staphylococci and enterococci. The absence of crystal violet allows the growth of enterococci, staphylococci. Gram-negative lactose fermenter enteric bacteria will produce red to pink colonies.

Composition per liter:

| | |
|-------------------------|---------|
| Peptones..... | 24.00 g |
| Lactose..... | 10.00 g |
| Bile salts mixture..... | 5.00 g |
| Neutral red..... | 0.05 g |
| Agar..... | 13.00 g |

Final pH of the ready to use medium: 7.4 +/- 0.2

Medium preparation:

Add 52.5 grams of dehydrated culture medium to 1 liter of distilled water. Heat with repeated stirring and boil for one minute to dissolve completely. Distribute and autoclave for 15 min at 121°C.

Quality specifications:

Dehydrated medium: homogeneous, light pinkish-beige fine powder.

Ready to use medium: clear to slightly hazy and reddish brown to reddish orange.

Microbiological response:

| Organism | Result |
|--|-----------------------------------|
| <i>Staphylococcus aureus</i> ATCC 25923 | Growth, pink to red colonies |
| <i>Enterococcus faecalis</i> ATCC 29212 | Growth, pink to red colonies |
| <i>Escherichia coli</i> ATCC 25922 | Growth, pink to red colonies |
| <i>Proteus mirabilis</i> ATCC 12453 | Growth, clear, swarming inhibited |
| <i>Salmonella typhimurium</i> ATCC 14028 | Growth, clear colonies |

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 if the color has changed from the original.