

HCM 017 Macconkey Agar

Usages:

For isolating lactose-fermenting Gram-negative enteric bacilli. (USP)。

Principle:

Peptones are sources of nitrogen and other nutrients. Lactose is a fermentable carbohydrate. When lactose is fermented, a local pH drop around the colony causes a color change in the pH indicator (neutral red) and bile precipitation. Bile salts, bile salts no. 3, oxgall and crystal violet are selective agents that inhibit growth of gram-positive organisms. Agar is the solidifying agent.

Formulation (per liter) :

Pancreatic Digest of Gelatin	17.0 g
Peptones (meat and casein)	3.0 g
Lactose Monohydrate	10.0 g
Sodium Chloride	5.0 g
Bile Salts	1.5 g
Agar	13.5 g
Neutral Red	30.0 mg
Crystal Violet	1 mg
Final pH	7.1 ± 0.2

How to use:

1. Suspend 50 g in 1 L of distilled or deionized water. Heat to boiling to dissolve completely. Autoclave at 121 °C for 15 minutes.

2. transfer 1 mL of Soybean–Casein Digest Broth to 100 mL of MacConkey Broth, and incubate at 42 to 44 for 24 to 48 hours. Subculture on a plate of MacConkey Agar at 30 to 35 deg.C for 18 to 72 hours.

Quality control:

Item	The name and number of strain	PR/G	Reaction
Growth rate	E.Coli ATCC8739	PR ≥ 0.7	Rose-red
Characteristic difference	Proteus mirabilis CMCC(b)49005	PR ≥ 0.7	Colorless, no swarming
Selective	Staphylococcus aureus ATCC6538	G ≤ 1	—

Storage: Keep container tightly closed, store in a cool, dry place, away from bright light. Storage period of three years.

Specifications: 500g/bottle