**MacConkey Agar (Without Salt)**

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| **Product No.** | **Product Category** | **Specification** |
| HCM194  | Dehydrated Culture Medium | 500g/bottle |

**Intended Use**

For the detection and counting of coliform bacteria.

**Principle and Interpretation**

Peptone provides nitrogen sources, vitamins and growth factors. Bile salts inhibit the growth of Gram-positive bacteria. Lactose provides carbon source. Neutral red was used to detect lactose-positive colonies, and the lactose-positive colonies were red. Agar is a coagulant.

**Formulation**

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| **Ingredients** | **/liter** |
| Peptone | 20.0g |
| Lactose  | 10.0g |
| Bile salts | 5.0g |
| Neutral red | 0.075g |
| Agar | 12.0g |
| pH 7.4±0.2 at 25°C |

**Preparation**

Suspend 47.0g in 1 L distilled or deionized water. Heat with frequent agitation and boil to completely dissolve the powder. Distribute into flasks. Autoclave at 121℃ for 15 minutes.

**Quality Control**

Cultural characteristics after 24 hours at 35-37°C.

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| **Quality control strains** | **Standard value** | **Characteristic reaction** |
| *Escherichia coli* ATCC25922 | PR≥0.7 | GrowGood, red colonies |
| *Salmonella typhimurium* ATCC14028 | GrowGood, colorless colonies |
| *Proteus mirabilis* ATCC12453 | - | GrowGood, colorless colonies,no swarming |
| *Enterococcus faecalis*ATCC29212  | The first area has a small amount of growth or no growth | - |

**Storage and Shelf Life**

Keep container tightly closed, store in a cool, dry place, away from bright light.

Use before expiry date on the label.

 **Precautions**

1. When weighing the dehydrated medium, please wear masks to avoid causing respiratory system discomfort

2. Keep container tightly closed after using to prevent clumping.

**Waste Disposal**

Microbiological contamination was disposed by autoclaving at 121°C for 30 minutes.

**Revision**

On November 1, 2024

**References**

1、Greenberg A.E., Trussell R.R., Clesceri L.S. (Eds.), Standard Methods for the Examination of Waterand Wastewater, 16th ed., A.P.H.A, Washington, D.C. (1985).

2、J. MacFaddin, Media for Isolation-Cultivation-Identification-Maintainance of Medical Bacteria, Vol. L, Williams and Wilkins, Baltimore(1985).

3、A. MacConkey, Bile salt media and their advantages in some bacteriological examinations, J. Hyg., 8; 322 (1908).

4、A. MacConkey, J. Hyg. 8, 333 (1905).