

MacConkey Agar No. 3 (NCM0174)

Intended Use

MacConkey Agar No. 3 is used for the cultivation of *Enterobacteriaceae* and is not intended for use in the diagnosis of disease or other conditions in humans.

Description

A modification recommended by the W.H.O. and the American Public Health Association for the isolation of *Enterobacteriaceae* from waters and sewage. The medium has been made more selective than MacConkey's original formula by the use of crystal violet as well as bile salts. Gram positive organisms will not grow on this medium.

Typical Formulation

Peptone	20.0 g/L
Lactose	10.0 g/L
Bile Salt No.3	1.5 g/L
Sodium Chloride	5.0 g/L
Neutral Red	0.03 g/L
Crystal Violet	0.001 g/L
Agar	15.0 g/L

Final pH: 7.2 ± 0.2 at 25°C

Formula may be adjusted and/or supplemented as required to meet performance specifications.

Precaution

Refer to SDS

Preparation

1. Suspend 51.5 grams of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121°C for 15 minutes.
4. Cool to 45-50°C.

Test Procedure

Inoculation Surface, streaking for single colonies. Incubation at 37°C aerobically for 18-24 hours.

Quality Control Specifications

Dehydrated Appearance: Beige to slight pink

Minimum QC:

Escherichia coli ATCC 25922

Enterococcus faecalis (inhibition) ATCC 29212

Results

Refer to appropriate references for results.

Technical Specification Sheet



Expiration

Refer to expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing or appearance has changed from the original color. Expiry applies to medium in its intact container when stored as directed.

Limitations of the Procedures

Due to nutritional variation, some strains may be encountered that grow poorly or fail to grow on this medium.

Storage

Store dehydrated culture media at 2-30°C away from direct sunlight. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light by keeping container tightly closed.

References

1. American Public Health Association (1950). Diagnostic Procedures and Reagents. 3rd edn. A.P.H.A., New York.
2. American Public Health Association (1946). Standard Methods for the examination of Water and Sewage. 9th edn. A.P.H.A., New York.

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