PRODUCT INFORMATION

MacConkey Agar

Cat. No. M13-106

DESCRIPTION

MacConkey Broth is recommended for the cultivation of gram negative lactose fermenting enteric bacteria in samples of water, milk and foods MacConkey Agar is used for the isolation and differentiation of the coliform organisms and enteric pathogens based upon the fermentation of lactose. This formulation is an improvement on the original. Modifications were made to improve the growth of Salmonella and Shigella strains. MacConkey Agar contains crystal violet and bile salts that inhibit Gram-positive organisms and allow Gram-negative organisms to grow. Coliforms that ferment lactose turn dark red to purple color and non-fermenters are colorless.

FORMULA (g/L)

Enzymatic Digest of Casein	1.5 g	Pancreatic Digest of Gelatin	17.0 g
Meat Peptone	1.5 g	Neutral Red	0.03 g
Lactose	10.0 g	Sodium Chloride	5.0 g
Agar	13.5 g	Bile Salts #3	1.5 g
Crystal Violet	0.001 g		

Final pH: 7.1 ± 0.2 at 25 ºC

*Grams per liter may be adjusted or formula supplemented to obtain desired performance.

PREPARATION

Mix 50 grams of the medium in one liter of purified water until evenly dispersed. Heat with repeated stirring and boil for one minute to dissolve completely. Distribute and autoclave at 121°C for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

1. The powder is homogeneous, free flowing and light pink to beige.
2. Visually the prepared medium is clear to trace hazy and medium to dark pinkish purple.
3. Expected cultural response after 18-24 hours at 35°C

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ORGANISM	Growth
Escherichia coli ATCC 25922	Growth, Pink-red colonies
Proteus vulgaris ATCC 13315	Growth, Colorless, Swarming Inhibited
Salmonella enteritidis ATCC 13076	Growth, Colorless Colonies
Staphylococcus aureus ATCC 6538	Growth Inhibited

STORAGE

Store the sealed bottle containing the dehydrated medium at 2 to 30°C. Once opened and recapped, place the container in a low humidity environment at the same storage temperature. Protect it from moisture and light. The dehydrated medium should be discarded if it is not free flowing or if the color has changed from the original color.

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