

### AMCB001

### Sterile Mac Conkey Broth

Recommended for the selective enrichment of *E.coli* from pharmaceutical products in accordance with the microbial limit testing by harmonized methodology of USP/EP/BP/JP.

<b>Composition</b>	<b>Ingredients Gms / Litre</b>
Peptone from Gelatin	20.000
Lactose	10.000
Ox bile dried	5.000
Bromocresol Purple	0.010

#### **Appearance:**

Sterile Mac Conkey broth in transparent screw capped glass bottle

#### **pH (at 25°C):**

7.10 to 7.50

#### **Principle:**

United States pharmacopoeia has recommended this medium for the presumptive identification of coliforms from water and other materials of sanitary importance. This medium is prepared in accordance with the harmonized method of EP/BP/JP/IP. Peptone from gelatin provides essential growth nutrients. Lactose is the fermentable carbohydrate. Ox-bile inhibits gram-positive organisms. Bromocresol purple is the pH indicator in the medium, which turns yellow under acidic condition. Lactose fermenting organisms turn the medium yellow due to the acidity produced on lactose fermentation. The colour change of the dye is observed when the pH of the medium falls below 6.8. Lactose non-fermenting organisms like *Salmonella* and *Shigella* do not alter the appearance of the medium. Transfer homogenate in Soybean Casein Digest Medium containing 1 gm or 1 ml of the preparation to be examined to 100 ml MacConkey Broth Incubation is carried at 42°-44°C for 48 hours. For further isolation subculture on MacConkey Agar. Growth of red generally non-mucoid colonies, sometimes surrounded by a reddish precipitation zone, indicates presence of coliforms.

#### **Quantity of Medium:**

100 ml in 125 ml bottle with screw cap

#### **Cultural Response:**

Cultural characteristics observed after incubation at 42-44°C for 48 hours and recovery should be greater than 70%.

#### **Sterilization Method:**

Sterilized by autoclaving at 121 °C as per validated cycle

#### **Sterility Test:**

Passes release criteria.

#### **Shelf Life and Storage Conditions:**

Use before expiry date on the label and store below 25°C.

#### **Reference Pharmacopoeia:**

USP/EP / BP / JP