**CT-Sorbitol MacConkey Agar**

|  |  |  |
| --- | --- | --- |
| **Product No.** | **Product Category** | **Specification** |
| HCM131 | Dehydrated Culture Medium | 500g/bottle |

**Intended Use**

For the isolation and differentiation of sorbitol-negative *Escherichia coli* serotype O157 from food and animal feed and other materials

**Principle and Interpretation**

Enzymatic digest of casein and enzymatic digest of animal tissue provides nitrogen source, vitamins and growth factors; sodium chloride maintains balanced osmoticpressure; sorbitol is a fermentable sugar; No. 3 bile salt and crystal violet inhibit Gram-positive bacteria, potassiumtellurite inhibits non-o157 *Escherichia coli,* and cefixime inhibits *Proteus*; neutral red is a pH indicator; and agar is the coagulant of the culture medium.

**Formulation**

|  |  |
| --- | --- |
| **Ingredients** | **/liter** |
| Enzymatic digest of casein | 17.0g |
| Enzymatic digest of animal tissue | 3.0g |
| Sorbitol | 10.0g |
| Bile salt No.3 | 1.5g |
| Sodium chloride | 5.0g |
| Neutral red | 0.03g |
| Crystal violet | 0.001g |
| Agar | 15.0g |
| pH 7.1±0.2 at 25°C | |

**Preparation**

Weigh 51.5g of this product, add 1L of distilled water or deionized water, stir, heat and boil until completely dissolved, dispense into Erlenmeyer flasks, and sterilize at 121℃ for 15min. Melt the sterilized culture medium and cool it to about 45℃, add 1 tube of supporting reagent (SR0240) (0.25mg potassium tellurite and 0.005mg Cefixime) to every 100mL of basal culture medium, mix and pour into the plate.

**Quality Control**

Cultural characteristics observed after incubation at 35-37°C for 18-24hours

|  |  |  |
| --- | --- | --- |
| **Quality control strains** | **Growth** | **Colony color** |
| *Escherichia coli* ATCC25922 | PR≥0.7 | pale pink to red |
| *Escherichia coli* 0157:H7  NCTC12900 | PR≥0.7 | colorless |
| *Staphylococcus aureus* ATCC 25923 | Total inhibition | - |

**Sorage and Shelf Life**

Keep container tightly closed, store in a cool, dry place, away from bright light. Storage period of 3 years.

**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 June 14, 2024

**References**

ISO 16654:2001 Horizontal method for the detection of Escherichia coli O157

FDA-BAM Medium M136