Technical Data Sheet



Desoxycholate Agar

Product No.	Product Category	Specification
HCM142	Dehydrated Culture Medium	500g/bottle

Intended Use

It is used for the selective isolation and plate counting of Gram-negative enteric bacteria.

Principle and Interpretation

Peptone provides carbon and nitrogen sources; lactose is a fermentable sugar; sodium chloride helps maintain a balanced osmotic pressure; ferric citrate, sodium citrate, and sodium deoxycholate inhibit the growth of Gram-positive bacteria; dipotassium hydrogen phosphate serves as a buffer; agar is the solidifying agent of the medium; neutral red is a pH indicator. Bacterial colonies that ferment lactose to produce acid appear red, while those that do not ferment lactose are colorless.

Formulation

Ingredients	/liter
Peptone	10.0g
Lactose	10.0g
Sodium chloride	5.0g
Ferric citrate	1.0g
Sodium citrate	1.0g
Dipotassium hydrogen phosphate	2.0g
Sodium deoxycholate	1.0g
Agar	15.0g
Neutral red	0.03g
pH7.3±0.2 at 25°C	

Preparation

Weigh 45 g of this product, add 1 L of distilled water or deionized water, stir and heat to boil until completely dissolved. Then cool it to around 50 °C, pour it into plates, and set aside for use after solidification.

Quality Control

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

Quality control strains	Approx. Inoculum(CFU)	Recovery	Characteristics
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Escherichia coli ATCC25922	10 – 100	PR≥0.5	Pink colonies with bile precipitate
Salmonella typhimurium ATCC14028	> 104	-	Colorless
Staphylococcus aureus ATCC6538	> 104	G≤1	-

Storage and Shelf Life

2-30°C, keep container tightly closed, avoid direct sunlight.

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 June 14, 2024

References

ISO4831.2-2006 microbiology of food and animal feeding stuffs ----- Horizontal method for the detection and enumeration of coliforms ---- Most probable number technique

ISO7251-2005 microbiology of food and animal feeding stuffs ----- Horizontal method for the detection and enumeration of presumptive Escherichia coli ---- Most probable number technique.

BAM Media M76: Lauryl Tryptose (LST) Broth.