

MM0379

Desoxycholate Citrate Agar

Use and description:

DCA is a selective medium for the isolation and differentiation of pathogenic enterobacteria in biological samples of animal origin, water, dairy and other food products.

This medium was developed by Leifsons by the use of chemically defined products – the current modified formula is one of the numerous variants of desoxycholate citrate agar. This formula provides high concentration of inhibiting substances.

Composition per liter:

Agar.....17.0 g
Lactose10.0 g
Beef extract20.0 g
Ferric ammonium citrate1.0 g
Neutral red0.02 g
Sodium citrate20.0 g
Sodium deoxycholate5.0 g

Final pH of the ready to use medium: 7.3 ± 0.2

Medium preparation:

Add 73.0 grams of dehydrated culture medium to 1 liter of distilled water.
DO NOT AUTOCLAVE THIS MEDIUM

Quality specifications:

Dehydrated medium: beige to pink beige
Ready to use medium: orange agar

Microbiological response – after incubation at temperature of 37C and 48hours.

Organism	Result
<i>Escherichia coli</i> ATCC 25922	partially inhibited – pink colonies with a bile precipitate at the edges
<i>Salmonella Typhimurium</i> ATCC14028	good – colorless colonies, black center
<i>Salmonella Enteritidis</i> CIP 82.97	good – colorless colonies
<i>Shigella flexneri</i> CIP 82.48	good – colorless colonies
<i>Enterococcus faecalis</i> ATCC29212	inhibited

Storage:

Dehydrated medium should be stored between 10 to 25°C. Once opened, place the container in a dark, dry place. The dehydrated medium should not be used if there is any lump or if the color has changed from the original.