

Desoxycholate Citrate Lactose Sucrose Agar

Use and description:

DCLS agar is a modification of Salmonella Shigella Agar and the Desoxycholate Citrate Agar described by Leifsons

Gram positive bacteria, coliforms and Proteus are completely or partially inhibited by Sodium citrate, Sodium thiosulphate and Sodium desoxycholate. Peptones and beef extract provides nitrogen, vitamins, minerals and amino acids essential for growth. Lactose and sucrose are fermentable carbohydrates, providing carbon and energy. Neutral red is the pH indicator. Bacteriological agar is the solidifying agent.

Composition per liter:

Peptone mix	10.0 g
Lactose	5.0 g
Sucrose	5.0 g
Sodium Deoxycholate	2.5 g
Sodium Thiosulphate	5.0 g
Sodium Citrate	10.5 g
Neutral Red	0.03 g
Agar	12.0 g

Final pH of the ready to use medium: 7.2 ± 0.2 at 25.0 °C

Medium preparation:

Add 50,0 grams of dehydrated culture medium to 1 liter of distilled water. Slowly bring to boiling, stirring with constant agitation until complete dissolution

DO NOT AUTOCLAVE IT !

Quality specifications:

1. The powder is homogeneous, free flowing beige to pinkish.
2. Ready to use medium: orange - red agar

Microbiological response after 24 hours at 30 °C:

Organism	Growth	Colony / Colour
Proteus vulgaris ATCC 13315	Moderate	colorless
Salmonella typhimurium ATCC 14028	Good	colorless
Salmonella enteritidis ATCC 13076	Good	colorless
E.coli ATCC 25922	Inhibited	pink-red

Storage:

Store the sealed bottle containing the dehydrated medium at 2 to 30.0 °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 light beige color.