

D7809 Deoxycholate Citrate Agar

Deoxycholate Citrate Agar is a selective medium recommended for the isolation of enteric pathogens particularly the *Salmonella* and *Shigella* species.

Composition:

Ingredients	Grams/Litre
Heart Infusion Solids	10.0
Proteose Peptone	10.0
Lactose	10.0
Sodium Citrate	20.0
Ferric Ammonium Citrate	2.0
Sodium Deoxycholate	5.0
Neutral Red	0.02
Agar	13.5
Final pH 7.5 +/- 0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder in a dry place in tightly-sealed containers at 2-25°C.

Appearance: Light pink colored, homogeneous, free flowing powder.

Gelling: Firm

Color and Clarity: Orange-red colored, clear to very slightly opalescent gel forms in the petri plates.

Directions:

Suspend 70.52 g of Deoxycholate Citrate Agar in 1000 ml of distilled water. Boil to dissolve the medium completely. Do not autoclave. Avoid excessive heating as it is detrimental to the medium.

Principle and Interpretation:

This medium is similar to deoxycholate agar but is moderately more selective for enteric pathogens owing to increased concentrations of both citrate and deoxycholate salts. The reduction of ferric ammonium citrate to iron sulphide by H₂S is indicated by blackening of the central position of the colony.

Cultural characteristics after 18-24 hours at 35°C.

Organisms (ATCC)	Growth
<i>Salmonella enteritidis</i> (13076)	+++
<i>Salmonella typhimurium</i> (14028)	+++
<i>Shigella flexneri</i> (12022)	++
<i>Escherichia coli</i> (25922)	+/-
<i>Enterococcus faecalis</i> (29212)	-

References:

1. Compendium of Methods for the Microbiological Examination of Foods. (1984). Speck, M., Ed. 2nd Edition. APHA. Washington, D.C.
2. Frieker, C. R., (1987). J. Appl. Bact. 63, 99.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

