

## Desoxycholate Lactose Agar

**Product No.** CM110

### Intended Use

Used for the plate detection of coliform and the isolation and identification of gram-negative enterobacter. (Japanese method)

**Specification** 250 g

<b>Ingredients</b>	<b>(g/L)</b>
Peptone	10.0
Lactose	10.0
Sodium deoxycholate	1.0
Dipotassium hydrogen phosphate	2.0
Sodium chloride	5.0
Ferric ammonium citrate	2.0
Neutral red	0.033
Agar	15.0
(pH 7.1 ± 0.2)	

### Additional Reagents

No

### Principle and Interpretation

Peptone is used as a nutrient in the medium to provide nitrogen source and growth factors required by the growth of bacteria. Lactose as a fermentable carbohydrate. The growth of gram-positive bacteria was inhibited by sodium deoxycholate and ferric ammonium citrate. Phosphate as acid-base buffer system. Neutral red is the indicator. Agar as a coagulant. Most intestinal bacteria ferment lactose to produce acid, and in the presence of neutral red indicator, the bacterial colony turns red, and the bile acid in the medium around the bacterial colony forms cholate and precipitates. On the other hand, *Salmonella* and *Shigella* do not ferment lactose, so the colonies are colorless.

### Directions

Suspend 45.0 g of the powder in 1 L of distilled water. Heat with frequent agitation and boil

to dissolve completely. Cool to approximately 50°C and pour into sterile Petri dishes. DO NOT AUTOCLAVE.

### Precautions

No

### Quality Control

Microorganisms	Method	Incubation	Growing status	Characteristic colony morphology
<i>Escherichia coli</i> ATCC 25922	Qualitative	36°C±1°C 24h±2h	Grown well	Pink colony with cholic acid deposits
<i>Citrobacter freundii</i> ATCC 43864			Grown well	Pink colony with or without cholic acid deposits
<i>Salmonella typhimurium</i> ATCC 14028			Grown well	Colorless colony, no cholic acid precipitation
<i>Staphylococcus aureus</i> ATCC 12600			Inhibition	---
<i>Streptococcus faecalis</i> CICC 1.0130			Inhibition	---

### Storage Conditions

Keep container tightly closed and store in a cool dry place.

### Shelf Life

3 years.

### Related Products

Product No.	Product Name	Specification
CM110-01	Desoxycholate Iactose Agar	1000 g
GCM110	Desoxycholate Iactose Agar (Granula)	250g

CM110-07

Desoxycholate Lactose Agar

100mL×10

*For laboratory use in industry or R&D purpose. Not for drug, household or other uses.*