

TM 714 – DEOXYCHOLATE CITRATE AGAR W/O SUCROSE

INTENDED USE

For isolation and identification of enteric pathogens.

PRODUCT SUMMARY AND EXPLANATION

Deoxycholate Citrate Agar without Sucrose is used for differentiation and identification of members of *Enterobacteriaceae*. Leifson developed Deoxycholate Agar as a differential medium containing pure chemicals.

COMPOSITION

Ingredients	Gms / Ltr
Biopeptone	7.000
Meat extract	3.000
Sodium deoxycholate	2.500
Sodium citrate	10.500
Lactose	5.000
Sodium thiosulphate	5.000
Neutral red	0.030
Agar	12.000

PRINCIPLE

The medium consists of biopeptone and Meat extract, which supply essential nutrients for the support of bacterial growth. Citrate and deoxycholate act as inhibitors. Sodium deoxycholate and sodium citrate inhibit gram-positive organisms. Lactose helps in differentiating enteric bacilli as lactose fermenters produce red coloured colonies while lactose non-fermenters form colourless colonies. Citrate and iron (Fe) combination has a strong hydrolyzing effect on agar when the medium is heated, producing a soft and unelastic agar. If autoclaved the agar becomes soft and almost impossible to streak.

INSTRUCTION FOR USE

- Dissolve 45.03 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE or OVERHEAT.
- Cool to 45-50°C.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Light yellow to pink homogeneous free flowing powder.
Appearance of prepared medium	: Reddish orange coloured, clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 7.2 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
<i>Bacillus subtilis</i> subsp. <i>spizizeni</i>	6633	$\geq 10^3$	Inhibited	0%	-	35 -37 °C	18-24 Hours
<i>Escherichia coli</i>	25922	50-100	Good-luxuriant	$\geq 50\%$	Pink with bile precipitate	35 -37 °C	18-24 Hours
<i>Klebsiella aerogenes</i>	13048	50-100	Good-luxuriant	$\geq 50\%$	Pink	35 -37 °C	18-24 Hours
<i>Salmonella</i> Typhimurium	14028	50-100	Good-luxuriant	$\geq 50\%$	Colourless	35 -37 °C	18-24 Hours
<i>Enterococcus faecalis</i>	29212	$\geq 10^3$	Inhibited	0%	-	35 -37 °C	18-24 Hours

PACKAGING:

In pack size of 100 gm and 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2 nd Edition.
2. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock, D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
3. Leifson, 1935 J. Path. Bacteriol, 40:581.



GMP Good Manufacturing Practices Certified	IVD For In Vitro Diagnostic Use	QTY. Quantity	LOT/ B. NO. Lot / Batch Number	REF Catalogue Number	 Manufacturer
 Temperature Unit	EC REP Authorized Representative MedNet GmbH Buckstrasse 10 48163 Münster, Germany	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
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