B163	DEOXYCHOLATE CITRATE AGAR
Formula	
Ingredients :	**gms/lit.**
Heart infusion solids	10.00
Proteose peptone	10.00
Lactose	10.00
Sodium citrate	20.00
Ferric ammonium citrate	2.00
Sodium deoxycholate	5.00
Neutral red	0.02
Agar	13.50
Final pH (at 25°C) : 7.5 ± 0.2	

Directions :

Suspend 70.52 grams in 1000 ml of distilled water. Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE. Avoid excessive heating as it is detrimental to the medium. Cool to 45-50°C. Mix well and pour into sterile petri plates.

Principle :

Heart infusion solids is a source of carbon and nitrogen. Deoxycholate Citrate Agar contains Proteose Peptone as a source of carbon, nitrogen, vitamins and minerals. Lactose is a carbohydrate. Sodium citrate and Sodium deoxycholate inhibit gram positive bacteria, coliforms and Proteus species. Ferric Ammonium Citrate aids in the detection of H_2S producing bacteria. Neutral Red is a pH indicator. Agar is a solidifying agent. In the presence of neutral red, bacteria that ferment lactose produce acid and form red colonies. Bacteria that do not ferment lactose form colorless colonies. If the bacteria produce H_2S, the colonies will have black centers. The majority of normal intestinal bacteria ferment lactose and do not produce H_2S (pink-red colonies without black centers). Salmonella and Shigella sp. Do not ferment lactose but Salmonella may produce H_2S (colourless colonies with or without black centers). Lactose – fermenting colonies may have a zone of precipitation around them caused by the precipitation of deoxycholate in the presence of acid.

QC Tests – (I)Dehydrated Medium				
	Colour :	Light yellow to pinkish beige		
	Appearance :	Homogeneous Free Flowing powder		
(II)Rehydrated medium				
	pH (post autoclaving/heating) :	7.5 ± 0.2		
	Colour (post autoclaving/heating) :	Reddish orange		
	Clarity (post autoclaving/heating) :	Clear to very slightly opalescent		
(III)Q.C. Test Microbiological				
	Cultural characteristics observed after 18-24 hrs.at 35-37°C.			
	MICROORGANISM (ATCC)	GROWTH	COLOUR OF COLONY	H_2S
	Salmonella enteritidis (13076)	Good-luxuriant	Colourless	positive reaction,black centered colonies
	Salmonella typhimurium (14028)	Good-luxuriant	Colourless	positive reaction,black centered colonies
	Salmonella Abony (NCTC6017)	Good-luxuriant	Colourless	positive reaction,black centered colonies
	Shigella flexneri (12022)	Good	Colourless	negative reaction
	Escherichia coli (25922)	Poor	Pink w/bile ppt.	negative reaction
	Escherichia coli (8739)	Poor	Pink w/bile ppt.	negative reaction
	Escherichia coli (NCTC9002)	Poor	Pink w/bile ppt.	negative reaction
	Streptococcus faecalis (29212)	Inhibited	-	negative reaction
	Staphylococcus aureus (25923)	Inhibited	-	negative reaction

Precautions :	1. For Laboratory Use.
	2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.
Limitations :	1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.
	2. Coliform starains may be encountered that will grow on this medium, making it difficult to detect pathogens.
	3. Heavy inoula should be distributed over the entire surface of the medium prevent complete masking of pathogens by coliform organisms.
Use :	For selective isolation of enteric pathogens especially Salmonella and Shigella spp.
Storage :	Dehydrated medium- below 30°C Prepared medium– Between 2 to 8°C.
Packing :	500 gm bottle

Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B163	70.52 g/l	7.09L	7.5 ± 0.2	NIL	DO NOT AUTOCLAVE

Refer disclaimer Overleaf

Disclaimer:

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related BIOMARKLABORATORIES publications.
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