

B444	CAL AGAR (CELLOBIOSE ARGININE LYSINE AGAR)					
Formula						
Ingredients :		gms/lit.				
Yeast extract		3.00				
Sodium chloride		5.00				
Cellobiose		3.50				
L-Arginine		6.50				
L-Lysine hydrochloride		6.50				
Sodium deoxycholate		1.50				
Neutral red		0.03				
Agar		20.00				
Final pH (at 25°C) : 7.1 ± 0.2						
Directions :						
Suspend 46 gms in 1000 ml. distilled water. Heat to boiling to dissolve the medium completely. DO NOT OVERHEAT OR AUTOCLAVE. Dispense as desired.						
Principle :						
This medium contains cellobiose as the fermentable carbohydrate. Amino acids L-Arginine and L-Lysine are also added in the medium. CAL Agar is a differential medium as it differentiates Yersinia on the basis of cellobiose fermentation and arginine or lysine decarboxylation. Neutral red is the pH indicator which turns red if the conditions are acidic. Yeast extract provides the necessary nutrients to the organisms while sodium chloride maintains the osmotic balance. Sodium deoxycholate inhibits gram – positive bacteria which may cause contamination during the cultivation. Agar is the solidifying agent.						
QC Tests – (I)Dehydrated Medium						
Colour :		Pinkish beige				
Appearance :		Homogeneous Free Flowing powder				
(II)Rehydrated medium						
pH (post autoclaving/heating) :		7.1 ± 0.2				
Colour (post autoclaving/heating) :		Red				
Clarity (post autoclaving/heating) :		Clear to slightly opalescent				
(III)Q.C. Test Microbiological						
Cultural characteristics observed after 18 –48 hrs at 35-37°C.						
MICROORGANISM (ATCC)		GROWTH	CELLOBIOSE	ARGININE	LYSINE	
Yersinia enterocolitica (27729)		Good –luxuriant	+	-	-	
Escherichia coli (25922)		Good	-	V	V	
Pseudomonas aeruginosa (27853)		Good	-	-	+	
Proteus mirabilis (25933)		Good	-	-	-	
Key : + = positive reaction - = negative reaction v = variable						
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.						
Use :						
For isolation and biochemical characterization of Yersinia enterocolitica.						
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
B444		46g/l	10.86L	7.1 ± 0.2	NIL	DO NOT OVERHEAT OR AUTOCLAVE