

**TECHNICAL SHEET**

<b>B483</b>	<b>DECARBOXYLASE AGAR BASE</b>					
<b>Formula</b>						
<b>Ingredients :</b>		<b>gms/lit.</b>				
Peptic digest of animal tissue		5.00				
Yeast extract		3.00				
Dextrose		1.00				
Bromo cresol purple		0.02				
Agar		15.00				
Final pH (at 25°C) : 6.5 ± 0.2						
<b>Directions :</b>						
Suspend 24 gms.in 1000 ml. distilled water. Boil to dissolve the medium completely. Add 5 gms. of desired L-Amino acid (L-Lysine, L-Arginine, L-Ornithine) in hydrochloride form per litre of the medium. Sterilize by autoclaving at 15lbs pressure (121°C) for 15 minutes. Dispense into sterile test tubes and cool in a slanted position .When L-ornithine hydrochloride is used, readjustment of pH is necessary.						
<b>Principle :</b>						
Peptic digest of animal tissue and yeast extract supply nitrogenous nutrients for the bacterial growth. Dextrose is the fermentable carbohydrate. Bromo cresol purple is the pH indicator which changes colour from purple to yellow in acidic condition. Decarboxylase activity is stimulated by acidic pH and hence the amino acids are decarboxylated or degraded to form corresponding amine. Production of these amines increases the pH of the medium changing the colour of the indicator and in turn the medium from yellow to purple violet. To obtain proper reactions, inoculated tubes must be protected from the air. This is done to avoid false alkalization at the surface of the medium, which could cause a decarboxylase negative bacteria to appear to be positive. This can be done by overlaying a medium with sterile mineral oil.						
<b>QC Tests - (I)Dehydrated Medium</b>						
Colour :		Creamish yellow				
Appearance :		Homogeneous Free Flowing powder				
<b>(II)Rehydrated medium</b>						
pH (post autoclaving/heating) :		6.5 ± 0.2				
Colour (post autoclaving/heating) :		Purple				
Clarity (post autoclaving/heating) :		Clear				
<b>(III)Q.C. Test Microbiological</b>						
Cultural characteristics observed after upto 4 days at 35-37°C.						
MICROORGANISM (ATCC )	LYSINE	ARGININE	ORNITHINE			
Citrobacter freundii (8090)	-	±	±			
Enterobacter aerogenes (13048)	+	-	+			
Escherichia coli (25922)	±	±	±			
Klebsiella pneumoniae (13883 )	+	-	-			
Proteus mirabilis (25933)	-	-	+			
Proteus vulgaris (6380 )	-	-	-			
Salmonella paratyphi A	-	(+) or +	+			
Salmonella typhi (6539 )	+	(+) or -	-			
Shigella flexneri (12022)	-	- or (+)	-			
Shigella sonnei (25931)	-	±	+			
Shigella dysenteriae (13313 )	-	- or (+)	-			
Serratia marcescens (8100)	+	-	+			
Key : - = negative reaction, yellow colour + = positive reaction, purple colour (+)= delayed positive reaction ± = variable						
<b>Precautions :</b>		1. For Laboratory Use. 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.				
<b>Limitations :</b>		1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.				
<b>Use :</b>		For differentiation of bacteria on the basis of their ability to decarboxylate the amino acid added to the medium.				
<b>Storage :</b>		Dehydrated medium- below 30°C Prepared medium- Between 2 to 8°C.				
<b>Packing :</b>		500 gm bottle				
<b>Product profile:</b>		Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
<b>B483</b>	24g/l		20.83L	6.5 ± 0.2	Amino acid as desired	121°C / 15 minutes

**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.

The information contained in this publication is based on our in-house studies and market performance and is to the best of our knowledge true and accurate. BIOMARK LABORATORIES reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.