

**TECHNICAL SHEET**

<b>B233</b>	<b>MIO MEDIUM (MOTILITY INDOLE ORNITHINE MEDIUM)</b>					
<b>Formula</b>						
<b>Ingredients :</b>		<b>gms/lit.</b>				
Casein enzymic hydrolysate		10.00				
Peptic digest of animal tissue		10.00				
Yeast extract		3.00				
L-Ornithine hydrochloride		5.00				
Dextrose		1.00				
Bromo cresol purple		0.02				
Agar		2.00				
Final pH (at 25°C) : 6.5 ± 0.2						
<b>Directions :</b>						
Suspend 31.02 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Dispense in test tubes in 5 ml amounts. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool the tubes in an upright position.						
<b>Principle :</b>						
MIO Medium contains Peptic digest of animal tissue and Casein enzyme hydrolysate which provide carbon and nitrogen. Yeast Extract provides vitamins and cofactors required for growth as well as additional sources of nitrogen and carbon. Dextrose is an energy source. Agar is added to demonstrate motility. The pH indicator, Bromo Cresol Purple, facilitates detection of decarboxylase activity.						
<b>QC Tests – (I) Dehydrated Medium</b>						
Colour :		Light yellow to pale green				
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 to slightly opalescent				
<b>(III) Q.C. Test Microbiological</b>						
Cultural characteristics observed after 40 – 48 hours at 35 - 37°C.						
MICROORGANISM (ATCC )	GROWTH	MOTILITY	INDOLE	ORNITHINE DECARBOXYLASE		
Enterobacter aerogenes (13048)	Luxuriant	+	-	+		
Escherichia coli (25922)	Luxuriant	+	+	+		
Klebsiella pneumoniae (13883 )	Luxuriant	-	-	-		
Proteus mirabilis (25933)*	Luxuriant	+	-	+		
Key : + = positive reaction						
- = negative reaction						
* = motility of Proteus mirabilis is temperature dependent. It is more Pronounced at 20°C and almost absent at 35°C.						
<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 the identification of Enterobacteriaceae on the basis of motility, indole production and ornithine decarboxylase activity.				
<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>B233</b>		31.02 g/l	16.118 L	6.5 ± 0.2	NIL	121°C / 15 minutes

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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