B840	**ARGININE DIHYDROLASE BROTH**
Formula	
Ingredients:	**gms/lit.**
Peptone	1.00
Sodium chloride	5.00
Dipotassium hydrogen phosphate	0.30
L-Arginine	10.00
Bromo cresol purple	0.016
Agar	3.00
Final pH (at 25°C) : 6.0 ± 0.2	

Directions :

Suspend 19.31 grams in 1000 ml distilled water. Heat if necessary, to dissolve the medium completely and distribute in 13x100 mm tubes. Sterilize by autoclaving at 115°C for 15 minutes. Allow the tubes to cool in an upright position.

Principle :

Bacteria producing arginine dihydrolase enzyme decarboxylates arginine present in this medium to putrescine. The production of amine, putrescine, elevates the pH. Bromo cresol purple is the pH indicator which forms purple colour in alkaline condition. Colour change from purple to yellow and then back to purple is positive reaction. Peptone provide the necessary nutrients to the organisms while L-arginine stimulates the arginine dihydrolase synthesis. Dipotassium phosphate buffers the medium while sodium chloride maintains the osmotic balance. In differentiation of Enterobacteriaceae, control tubes without arginine must be used. If the tubes give positive purple reaction the test is considered as negative.

QC Tests – (I)Dehydrated Medium	
Colour :	Light yellow to grey
Appearance :	Homogeneous Free Flowing powder
(II)Rehydrated medium	
pH (post autoclaving/heating) :	6.0 ± 0.2
Colour (post autoclaving/heating) :	Purple
Clarity (post autoclaving/heating) :	Clear to slightly opalescent
(III)Q.C. Test Microbiological	

Cultural characteristics observed after 18 - 24 hrs. at 35-37°C.

MICROORGANISM (ATCC)	GROWTH	MOTILITY	ARGININE DIHYDROLASE
Salmonella typhi (6539)	Luxuriant	+	+
Salmonella typhimurium (14028)	Luxuriant	+	+
Proteus vulgaris (13315)	Luxuriant	+	-
Enterobacter aerogenes (13048)	Luxuriant	+	-
Klebsiella pneumoniae (13883)	Luxuriant	-	-
Enterobacter sakazakii (12868)	Luxuriant	+	+

Key : Arginine dihydrolase : + = positive, purple colour
- = negative, yellow colour no colour change
Motility: + = positive, growth away from stab line causing turbidity
- = negative, growth along with stab line

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 detection of Arginine dihydrolase producing microorganisms.
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
B840	19.31 g/l	25.893 L	6.0 ± 0.2	Nil	115^0C /15 min.

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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