

| | | | | | |
|--|--|---------------------------------|----------------------------------|------------|-----------------------------|
| B1811 | Saline medium for detection of arginine dehydroxylase | | | | |
| Formula | | | | | |
| Ingredients: | gms/lit. | | | | |
| L-Arginine, monohydrochloride | 5.000 | | | | |
| Yeast extract | 3.000 | | | | |
| Glucose | 1.000 | | | | |
| Bromocresol purple | 0.015 | | | | |
| Final pH (at 25°C) | 6.8±0.2 | | | | |
| Final pH (at 25°C) : 6.8 ± 0.2 | | | | | |
| Directions : | | | | | |
| Dissolve 9.01 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely and distribute in 13 x 100mm tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Allow the tubes to cool in an upright position. | | | | | |
| Principle : | | | | | |
| Yeast extract provide the necessary nutrients to the organisms while L-arginine stimulates the arginine dihydrolase synthesis and glucose provides the energy source. Bacteria can be differentiation on the basis of their decarboxylating activity towards the amino acid. Bacteria producing arginine dihydrolase enzyme in this medium decarboxylates arginine to putrescine .The production of amine, putrescine elevates the pH of medium which is detected by the indicator, bromocresol purple which forms purple in alkaline condition. Colour change from purple to yellow and then back to purple is positive reaction. . Arginine reaction is strictly anaerobic; therefore the broth tubes must be overlaid with mineral oil. | | | | | |
| QC Tests – (I)Dehydrated Medium | | | | | |
| | Colour : | Light yellow to grey | | | |
| | Appearance : | Homogeneous Free Flowing powder | | | |
| (II)Rehydrated medium | | | | | |
| | pH (post autoclaving/heating) : | 6.8 ± 0.2 | | | |
| | Colour (post autoclaving/heating) : | Purple | | | |
| | Clarity (post autoclaving/heating) : | Clear | | | |
| (III)Q.C. Test Microbiological | | | | | |
| Cultural characteristics observed after 18 - 24 hrs. At 35-37°C. | | | | | |
| | MICROORGANISM (ATCC) | GROWTH | ARGININE DIHYDROLASE | | |
| | Enterobacter aerogenes ATCC 13048 | Luxuriant | negative reaction, yellow colour | | |
| | Enterobacter sakazakii, ATCC 12868 | Luxuriant | positive reaction, purple colour | | |
| | Klebsiella pneumoniae ATCC 13883 | Luxuriant | negative reaction, yellow colour | | |
| Precautions : | | | | | |
| 1. For Laboratory Use. | | | | | |
| 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials. | | | | | |
| Limitations : | | | | | |
| This medium is suited for Arginine hydrolysis of Cronobacter sakazakii . It may not be suited for the detection of arginine hydrolysis of other species | | | | | |
| 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 |
| B1811 | 9.01g/l | 55.493/ L | 6.0 ± 0.2 | Nil | 115 ⁰ C /15 min. |

Refer disclaimer Overleaf

BIOMARK Laboratories-INDIA

www.biomarklabs.com

TECHNICAL SHEET

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.