Azotobacter Agar (Mannitol)

Intended Use
Azotobacter Agar (Mannitol) is recommended for isolation, cultivation and identification of mannitol positive *Azotobacter* species from soil.

Summary
Bacteria of the family *Azotobacteraceae* constitute the majority of heterotrophic free-living nitrogen fixing bacteria. *Azotobacter* is a genus of free-living diazotrophic bacteria which have the highest metabolic rate compared to any other microorganisms.

Principle
Azotobacter has generated a good deal of interest in the scientific community because of their unique mode of metabolism, by which they can fix nitrogen aerobically. Azotobacter Broth (Mannitol) is used for isolation and cultivation of mannitol positive *Azotobacter* species from soil. It is also useful for maintenance of *Azotobacter* species by adding extra 1% Mannitol to the medium as specified by the American Type Culture Collection.

Formula*

Ingredients	**g/L**
Dipotassium Phosphate	1.0
Magnesium Sulphate	0.2
Sodium Chloride	0.2
Ferrous Sulphate	TRACE
Soil Extract	5.0
Mannitol	20.0
Agar	15.0
Final pH (at 25°C)	8.3 ± 0.2

*Adjusted to suit performance parameters

Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Specimen Collection and Handling
Ensure that all samples are properly labelled.
Follow appropriate techniques for handling samples as per established guidelines.
Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure. The samples must be stored and tested within the permissible time duration.
After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions
1. Suspend 41.40 g of the powder in 1000 mL purified / distilled water.
2. Heat if necessary, to dissolve the powder completely.
3. Dispense as desired Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
4. If slight precipitate occurs after autoclaving, distribute it evenly before pouring into sterile Petridishes.

Quality Control
Dehydrated Appearance: Off white coloured, homogeneous free flowing powder.
Prepared Appearance: Light yellow to off-white coloured clear to slightly opalescent gel with slight precipitate forms in petridishes.

Cultural Response: Cultural characteristics was observed after an incubation at 25°C-30°C for 24 to 48 hours.

Organism (ATCC)	Growth
Azotobacter beijerinckii (12981)	good
Azotobacter nigricans (35009)	good

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Precaution

In vitro diagnostic use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens.

Warranty

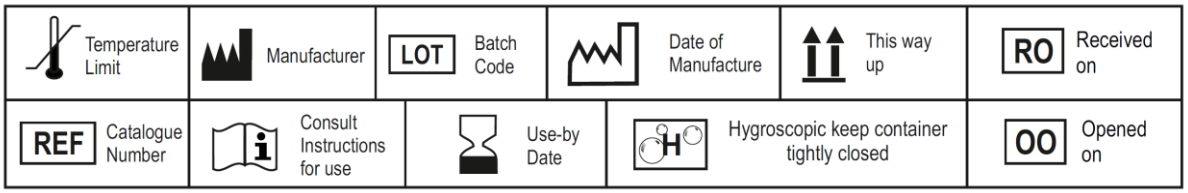
This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Subba Rao N.S., 1977, Soil Microorganisms & Plant Growth, Oxford and IBH Publishing Co., New Delhi.
2. Pelczar M. Jr., 1957, Manual of Microbiological Methods.
3. ATCC Catalogue of Bacteria & Bacteriophages, 1992, 18th Ed, American Type Culture Collection, Rockville, MD.
4. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201010350100	Dehydrated Culture Media	100 g
201010350500	Dehydrated Culture Media	500 g



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Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.