



Trichophyton Agar No.3

M533

Trichophyton Agar No.3 is used for differentiation of *Trichophyton* species.

Composition**

Ingredients	Gms / Litre
Vitamin free casein acid hydrolysate	2.500
Dextrose	40.000
Monopotassium dihydrogen phosphate	1.800
Magnesium sulphate	0.100
Inositol	0.050
Thiamine hydrochloride	0.0002
Agar	15.000
Final pH (at 25°C)	6.8±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 59.45 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Dispense in test tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Allow the tubed medium to cool in a slanted position.

Principle And Interpretation

Nutritional tests were originally described by George and Camp (2) as an aid in the routine identification of *Trichophyton* species that seldom produce conidia or that resemble each other morphologically (2). Certain species have distinctive nutritional requirements, whereas others do not.

The method employs a casein basal medium that is vitamin-free (Trichophyton Agar-1, M531) to which different vitamins are added i.e. inositol (Trichophyton Agar-2, M532), thiamine and inositol (Trichophyton Agar-3, M533), thiamine (Trichophyton Agar-4) (M534) and nicotinic acid (Trichophyton Agar-5) (M535). The method also employs an ammonium nitrate basal medium (Trichophyton Agar-6, M536) to which histidine is added (Trichophyton Agar-7, M152) (1). The various additives added help to determine the specific vitamin and amino acid requirements of the isolates. Trichophyton Agar-3 contains added inositol and thiamine. The medium is used along with Trichophyton Agar-1 to determine whether the isolate requires inositol, thiamine or both.

Nutritional requirements are determined by inoculating a control medium and a medium enriched with a specific vitamin or amino acid with *Trichophyton* isolates that have been presumptively identified by gross colony characteristics and microscopic morphology (1, 2, 3-6). Moderate to heavy growth in the vitamin or amino acid-enriched medium compared to little or no growth in the basal medium indicates that the isolate requires that nutrient.

Quality Control

Appearance

White to light yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Light amber coloured clear to slightly opalescent gel forms in tubes as slants

Reaction

Reaction of 5.95% w/v aqueous solution at 25°C. pH : 6.8±0.2

pH

6.60-7.00

Cultural Response

M533: Cultural characteristics observed after an incubation at 25-30°C within 2 weeks .

Organism

Trichophyton

mentagrophytes ATCC 9533

Trichophyton rubrum ATCC 28191

Growth

luxuriant

luxuriant

Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label .

Reference

1. Murray P. R., Baron E. J., Jorgensen J. H., Tenover J. C., Tenover F. C., (Eds.), 8th Ed., 2003, Manual of Clinical Microbiology, ASM, Washington, D.C.
2. George L. K., Camp L. B., 1957, J. Bacteriol., 74:113.
3. Roberts G. D., 1985, In Washington (Ed.), Laboratory Procedures in Clinical Microbiology, 2nd Ed., Springer- Verlag, New York, N.Y.
4. Weitzman I., Rosenthal S. A. and Silva-Hutner M., 1988, In Wentworth (Eds.), Diagnostic Procedures for Mycotic and Parasitic Infections, 7th Ed., American Public Health Association, Washington, D.C.
5. Haley L. D., Trandel J. and Coyle M. B., 1980, Cumitech 11, Practical methods for culture and identification of fungi in the clinical mycology laboratory, Coord. Ed., Sherris, American Society for Microbiology, Washington, D.C.
6. McGinnis M. R. and Pasarell L., 1992, In Isenberg (Ed.), Clinical Microbiology Procedures Handbook, Vol. 1, American Society for Microbiology, Washington, D.C.

Revision : 1 / 2011

**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 HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd 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.