

Product Information

83551 Rice Extract Agar (REA)

Test medium according to Taschdjian for the differentiation of yeasts, in particular *Candida albicans* and *Candida stellatoidea* alongside other *Candida* species, based on their typical chlamydo spores. Likewise, other species of yeast can be differentiated on the basis of micromorphological criteria with rice extract agar.

Composition:

Ingredients	Grams/Litre
Rice extract concentrate	0.7
Agar	14.3

Final pH 5.8 +/- 0.2 at 25°C.

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Directions :

Dissolve 15 g in 1 litre distilled water. Sterilize by autoclaving at 121°C for 15 minutes. Pour plates of 1 to 2 mm depth. Using a platinum loop, a very small amount of material can be taken from a preliminary culture or a sample, heavily infected with *Candida*. Streak the sample without pressure on the surface of the Rice Extract Agar plates in zig-zag lines. Cover the streaked surfaces with sterile cover glasses. Vaginal smears obtained using cotton wool swabs can be directly smeared on the surface of the culture medium.

Incubate the plates aerobically for 2-4 days at 23-28°C,

Principle and Interpretation:

The Rice extract is the sole source of nutrient in the medium. The lack of nutrients together with the oxygen-deficient culture conditions create an environment which induces the formation of specific morphological forms (chlamydo spores and pseudomycelia in particular) in some yeasts. Obtain oxygen-deficient culture conditions by covering the inoculated plates with a cover glass.

The Addition of 1 vial Tween® 80 solution (93782) enhances the formation of chlamydo spores in most *Candida* species. **Note:** chlamydo spores may not be formed at temperatures over 28°C. Evaluate the culture by direct examination of the resulting culture medium under the microscope through the cover glass. Further studies should be carried out to confirm the results obtained (Ajello et al. 1966).

Morphology and structures of different Fungi:

<i>Candida albicans</i> , very occasionally <i>Candida stellatoidea</i>	Chlamydo spores (diameter 6-12 µm, thick, strongly refractory cell wall with double contours), pseudomycelium, blastospores (diameter 3-6 µm)
Other <i>Candida</i> species	Pseudomycelium, sometimes also true mycelium, usually blastospores, no chlamydo spores
Trichospore species	Arthrospores, blastospores, true mycelium, occasionally also pseudomycelium
Other yeast species	Blastospores, no chlamydo spores, no pseudomycelium
Perfect yeasts	Ascospores in the asci
Geotrichim species	Arthrospores, true mycelium, no blastospores

Cultural characteristics after 2-4 days at 23-28°C.

Organisms (ATCC)	Growth
<i>Candida albicans</i> (10231)	+
<i>Candida tropicalis</i> (1369)	+
<i>Saccharomyces cerevisiae</i> (7752)	+

References:

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