

Reference: 0920

Technical Data Sheet

Product: NIKERSON AGAR (BIGGY)

Specification

Culture medium for the isolation and identification of Candida sp.

Presentation

20 Prepared Plates	Packaging Details	Shelf Life	Storage	
90 mm	1 box with 2 packs of 10 plates/pack. Single	3 months	2-14°C	
with: 21 + 2 ml	cellophane			

Composition

Composition (g/l):		
Yeast extract	1.00	Note: A decrease in pH is normal and does not
Dextrose	10.00	affect performance.
Glycine	10.00	
Sodium sulfite	3.00	
Ammonium Bismuth Citrate	5.00	
Agar	15.00	

Description / Technique

Nickerson Agar (BIGGY) is suitable for the isolation and identification of Candida species. The medium is made according to the general principles of Bismuth-Sulfite Agar. An inhibitory and differential medium using a high concentration of glycine for selectivity. This medium is highly inhibitory, and does not allow bacterial growth, however most Candida spp. grow freely and rapidly. Occasionally, tiny colonies of bacteria or highly repressed moulds may appear.

The appearance of the colonies in this medium after an incubation of 48-72 hours at 28-30 °C is as follows:

- Candida albicans: Creamy colonies, very convex, circular with very slight mycelial border and black or dark brown in colour. It has no metallic sheen or diffused pigment, even after 72 hours of incubation.
- Candida tropicalis: Acuminated colonies, creamy, irregular and with slight mycelial borders. Dark brown with black centre. After 72 hours of incubation the colonies may take on a metallic sheen and produce a diffused zone of pigment.
- Candida krusei: Big and plain colonies, with irregular borders. Brown colour, darker in the centre. A yellow halo appears around the colony.
- Candida parakrusei: Plain colonies, average size, irregular. Dark red centre and light red borders, but when the border is mycelial it looks yellow.
- Candida pseudotropicalis: Big and plain colonies, dark red colour with mycelial border.
- Candida stellatoidea: Average size plain colonies, dark brown colour, without mycelial development.
- Rhodotorula: Creamy convex colonies, with irregular border and colours ranging from pink to orange.
- Moulds in general: Restricted colonial growth and cottony appearance.

Note: A decrease in pH is normal and does not affect performance.

Quality control

Physical/Chemical control

Color: Off-white pH: 6.8 ± 0.2 at 25° C

Microbiological control

Spiral Spreading: Practical range 100±20 CFU; Min. 50 CFU (Productivity) / 10⁴-10⁶ CFU (Selectivity). Aerobiosis. Incubation at 28 ± 2°C during 24 - 72 h.

Microorganism Growth

Candida albicans ATCC® 10231, WDCM 00054 Candida tropicalis ATCC® 1369 Escherichia coli ATCC® 25922, WDCM 00013

Good. Dark brown colonies. Good. Dark brown colonies. Inhibition (Partial to complet)

Sterility Control

Incubation 48 hours at 30-35°C and 48 hours at 20-25°C: NO GROWTH Check at 7 days after incubation in same conditions

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