Candida Elective Agar acc. to NICKERSON

For the isolation and preliminary differentiation of Candida and other yeasts according to NICKERSON (1953).

IVD

In Vitro Diagnostic Medical Device –

For professional use only

CE

Version 17-10-2008
Merck KGaA, 64271 Darmstadt

See also General Instruction for Use „How to use Dehydrated Culture Media"

For MSDS, warnings and precautions see our website: www.merck-chemicals.com

Principle

Microbiological method

Mode of Action

This culture medium contains, in addition to a nutrient base consisting of yeast extract, glycine and glucose, "bismuth sulfite indicator" which largely suppresses the growth of accompanying microorganisms. Candida and most other yeasts develop normally, they reduce bismuth sulite and become brown to black in colour. BARR and COLLINS (1966) recommended addition of 2 mg neomycin sulfate/litre to improve the inhibition of the accompanying bacterial flora.

Typical Composition (g/litre)

Yeast extract 1.0; peptone from soymeal 2.0; glycine 10.0; D(+)glucose 10.0; bismuth sulfite indicator 2.0; agar-agar 15.0.

Preparation

Suspend 40 g/litre, shake well to ensure uniform distribution of the resulting precipitate, pour plates.

■ **Do not autoclave!**

pH: 6.5 ± 0.2 at 25 °C.

The prepared plates are opalescent and yellowish-white in colour.

Storage

Usable up to the expiry date when stored dry and tightly closed at +15 to +25 °C. Protect from light.

After first opening of the bottle the content can be used up to the expiry date when stored dry and tightly closed at +15 to +25 °C.

Specimen

e.g. Vaginal Swabs.

Clinical specimen collection, handling and processing, see general instructions of use.

Experimental Procedure

Take a specimen from the mycelial growth with a platinum loop or make a pharyngeal or vaginal smear using a cotton wool swab, spread sample material in the surface of the medium.

Incubation: 4 days at 28 °C aerobically and if necessary at 35 °C.

Brown to black, smooth colonies with a pasty appearance are usually yeasts.

Similarly coloured bacterial colonies or yeast-like fungi do not often grow on this medium and can be differentiated by microscopic examination. Dermatophytes and mould appear seldom on this culture medium and can easily be recognized by the aerial mycelium.

Further tests should be performed to differentiate the yeasts and particularly to identify Candida albicans. Biochemical methods for identifying Candida species have been described by MARTIN and SCHNEIDAU (1970).

Literature

BARR, F.S., a. COLLINS, G.F.: A rapid method for the isolation and identification of Candida. - **J. Southern Med. Assoc., 59**; 694-695 (1966).

NICKERSON, W.J.: Reduction of inorganic substances by yeasts. I. Extra-cellular reduction of sulfite by species of Candida. - **J. Infect. Dis., 93**; 43-56 (1953).

NICKERSON, W.J.: Biology of Pathogenic Fungi. - Chronica Botanica Comp. Waltham (1947).

MARTIN, M.V., a. SCHNEIDAU, J.D.: A simple and reliable assimilation test for the identification of Candida species. - **Am. J. Clin. Path., 53**; 875-879 (1970).

Ordering Information

Product	Ordering No.	Pack size
Candida Elective Agar acc. to NICKERSON	1.10456.0500	500 g
Candida Elective Agar acc. to NICKERSON	1.10456.5000	5 kg
Merckoplate® Candida Elective Agar acc. to NICKERSON	1.10412.0001	1 x 20 plates

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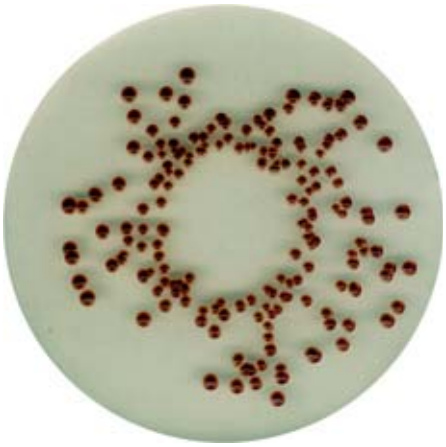
Quality control

Test strains	Growth	Recovery rate	Colony colour
Candida albicans ATCC 10231	good / very good	≥ 70 %	brown / black
Candida albicans 1021	good / very good		brown / black
Candida glabrata DSMZ 70614	fair / very good		brown
Saccharomyces cerevisiae ATCC 7752	none / poor		
Proteus mirabilis ATCC 29906	none / poor		
Enterobacter cloacae ATCC 13047	none / poor		
Pseudomonas aeruginosa ATCC 27853	none / poor		
Escherichia coli ATCC 25922	none		



Candida albicans ATCC 10231

Candida glabrata DSMZ 70614