

## BIGGY (NICKERSON) AGAR

Selective medium for *Candida* spp isolation and differentiation

TYPICAL FORMULA	(g/l)
Yeast Extract	1.0
Bismuth Ammonium Citrate	5.0
Sodium Sulphite	3.0
Glucose	10.0
Glycine	10.0
Agar	18.0
Final pH 6.8 ± 0.2	

### DESCRIPTION

BIGGY (NICKERSON) AGAR is a selective medium for *Candida* spp isolation and differentiation according to Nickerson method based on colony morphology.

### PRINCIPLE

Yeast extract is a source of vitamins, particularly of the B-group, essential for growth. Glycine stimulates growth. Glucose is the fermentable carbohydrate providing carbon and energy. *Candida* spp reduce bismuth sulphite to bismuth sulphide forming brown to black colonies. Bismuth ammonium citrate and sodium sulphite inhibit bacterial growth without affecting the growth of *Candida* spp.

### PREPARATION

Melt the content of the bottle in a boiling water-bath at 100°C until completely dissolved and distribute into sterile final containers.

### TECHNIQUE

Inoculate and incubate at 25 ± 2°C for 18-72 hours and up to 5 days if required.

### INTERPRETATION OF RESULTS

Differentiation is based on colony morphology:

- ***Candida albicans***: brown to black, smooth, circular or hemispherical colonies with a slight mycelial fringe.
- ***Candida krusei***: large, flat, wrinkled colonies with silvery black-brown grading into a brown periphery and yellow halo.
- ***Candida parakrusei***: flat, frequently wrinkled, medium-sized colonies, glistening dark reddish-brown grading to light reddish-brown and an extensive yellowish mycelial fringe.
- ***Candida pseudotropicalis***: dark reddish-brown, glistening, large, flat colonies with a slight mycelial fringe.
- ***Candida tropicalis***: dark-brown, discrete colonies with black center prominence and a slight mycelial fringe. Diffuse blackening of medium, with this species only, after about 72 hours of incubation.
- ***Candida stellatoidea***: very dark-brown, flat medium-sized colonies with almost no mycelial development.

### STORAGE

10-25°C away from light, until the expiry date on the label or until signs of deterioration or contamination are evident.

### WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product is designed for *In vitro* diagnostic use and must be used only by properly trained operators.

### DISPOSAL OF WASTE

Disposal of waste must be carried out according to the national and local regulations in force.

### REFERENCES

1. Nickerson WJ. 1953. Reduction of inorganic substances by yeast. I. Extracellular reduction of sulfite by species of candida. J Infect Dis 93:43.
2. Warren NG and KC Hazen. 1955. Candida, Cryptococcus and other yeast of medical importance 723-737.
3. In PR Murray, EJ Baron, Ma Pfaller, FC Tenover and RH Tenover (ed.). Manual of clinical microbiology 6<sup>th</sup> ed. America society for microbiology, Washington DC.



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## PRODUCT SPECIFICATIONS

### NAME

BIGGY (NICKERSON) AGAR

### PRESENTATION

Bottles containing 100 ml of medium

### STORAGE

10-25°C

### PACKAGING

Ref.	Content	Packaging
442350	6 bottles x 100 ml	6 bottles in cardboard box

### pH OF THE MEDIUM

6.8 ± 0.2

### USE

BIGGY (NICKERSON) AGAR is a selective medium for *Candida* spp isolation and differentiation according to Nickerson method based on colony morphology

### TECHNIQUE

Refer to technical sheet of the product

### APPEARANCE OF THE MEDIUM

Opaque white medium

### SHELF LIFE











2 years

### QUALITY CONTROL

- Control of general characteristics, label and print
- Sterility control  
7 days at 22 ± 1°C, in aerobiosis  
7 days at 36 ± 1°C, in aerobiosis
- Microbiological control  
Inoculum for productivity: 10-100 UFC/ml  
Inoculum for selectivity: 10<sup>4</sup>-10<sup>5</sup> UFC/ml  
Inoculum for specificity: ≤10<sup>4</sup> UFC/ml  
Incubation Conditions: 18-72 hours at 25 ± 2°C, in aerobiosis

Microorganisms		Growth	Color
<i>Candida albicans</i>	ATCC 10231	Good	Brown to black
<i>Candida pseudotropicalis</i>	ATCC 14254	Good	Brown to red
<i>Escherichia coli</i>	ATCC 25922	Inhibited	---
<i>Staphylococcus aureus</i>	ATCC 25923	Inhibited	---

### TABLE OF SYMBOLS

 LOT	Batch code	 IVD	<i>In vitro</i> Diagnostic Medical Device		Manufacturer		Use by		Fragile, handle with care
 REF	Catalogue number		Temperature limitation		Contains sufficient for <n> tests		Caution, consult instructions for use		Do not reuse



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