

PRODUCT INFORMATION

Biggy Agar

Cat. No. B02-105

DESCRIPTION

Biggy Agar is the abbreviation for Bismuth Glucose Glycine Yeast Agar. It is used to isolate and differentiate *Candida albicans* and *Candida tropicalis*, and to differentiate the species according to the Nickerson method. Nickerson discovered that *Candida albicans* can be differentiated from other *Candida* spp. on this medium based on colony morphology.

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

The different species of *Candida* produce different kinds of infections. Candidiasis, the most commonly encountered opportunistic fungal infection, is mostly caused by *Candida albicans*. *Candida tropicalis* and *Candida glabrata* infections occur less often. *Candida* spp are present in clinical specimens resulting from environmental contamination, colonization, or a disease process.

FORMULA (g/L)

Bacteriological agar	13.0 g	Yeast extract	2.5 g
Glycine	10.0 g	Dextrose	11.5 g
Bismuth citrate	3.0 g	Sodium sulfite	3.0 g
Ammonium Chloride	2.0 g		

Final pH: 7.0 ± 0.2 at 25 °C

*Grams per liter may be adjusted or formula supplemented to obtain desired performance.

PREPARATION

Suspend 45 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. AVOID OVERHEATING. DO NOT AUTOCLAVE. Cool to 45-50 °C, mix well and dispense into plates.

QUALITY CONTROL SPECIFICATIONS

1. The powder is homogenous, free flowing and beige.
2. Visually the prepared medium is white-opaque without rests.
3. Expected cultural response after 18-72 hours at 25 °C ± @°C, up to 5 days.

ORGANISM	RESULT	CHARACTERISTIC REACTION
<i>Candida albicans</i> ATCC 10231	Good Growth	Brown to red colonies
<i>Candida albicans</i> ATCC 11006	Good Growth	Brown to red colonies
<i>Candida albicans</i> ATCC 18804	Good Growth	Brown to red colonies
<i>Candida kefyr</i> ATCC 8853	Good Growth	Dark reddish to brown colonies
<i>Candida krusei</i> ATCC 14243	Good Growth	Brown-black colonies
<i>Escherichia coli</i> ATCC 25922	Inhibited growth	N/A
<i>Staphylococcus aureus</i> ATCC 25923	Inhibited growth	N/A
<i>Candida tropicalis</i> ATCC 750	Good Growth	Brown colonies with dark brown to black centers
<i>Issatchenkia orientalis</i> ATCC 6258	Good Growth	Dark brown colonies w/ dull crinkled surface

STORAGE

Store the sealed bottle containing the dehydrated medium at 2 to 25°C. Once opened and recapped, place the container in a low humidity environment at the same storage temperature. Protect it from moisture and light. The dehydrated medium should be discarded if it is not free flowing or if the color has changed from the original color.