BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

B962	**CAFFEIC ACID FERRIC CITRATE TEST AGAR**

Formula

Ingredients :	**gms/lit.**
Yeast extract	2.00
Dextrose	5.00
Ammonium sulphate	5.00
Dipotassium phosphate	0.80
Magnesium sulphate	0.70
Caffeic acid	0.18
Ferric citrate	0.02
Agar	20.00

Final pH (at 25°C) : 6.5 ± 0.2

Directions :

Suspend 33.7 gms. in 1000 ml. distilled water. Boil to dissolve the medium completely. Dispense and sterilize by autoclaving at 15lbs pressure (121°C) for 15 minutes. Cool to 50-55°C.Add 50 mcg/ml of chloramphenicol if desired.

Principle :

The medium contains caffeic acid which is a selective agent for Cryptococcus neoformans. Caffeic acid is an O-diphenol compound which can be oxidized by phenoloxidase enzyme to produce dark brown melanin pigmentation. Cryptococcus neoformans has a unique ability to produce melanin or melanin-like pigment from p and o-diphenols and can be differentiated from Candida albicans. Ferric citrate is also an important constituent of the medium as pigment is synthesized by Cryptococcus neoformans only in presence of ferric citrate. If Chloramphenicol is added in the medium then it inhibits the bacterial flora. Dextrose is the fermentable carbohydrate in the medium while yeast extract serves as the source of nitrogenous nutrients and B vitamins. Sulphates and phosphate, buffers the medium.

QC Tests – (I)Dehydrated Medium	
Colour :	Light yellow
Appearance :	Homogeneous Free Flowing powder
(II)Rehydrated medium	
pH (post autoclaving/heating) :	6.5 ± 0.2
Colour (post autoclaving/heating) :	Light blue
Clarity (post autoclaving/heating) :	Clear to very slightly opalescent
(III)Q.C. Test Microbiological	

Cultural characteristics observed after 24 -48 hrs. at 25°C.

MICROORGANISM (ATCC)	GROWTH	COLOUR OF COLONY
Candida albicans (10231)	Good	White
Cryptococcus neoformans	Good	Brown
Escherichia coli (25922)	Inhibited	-
Staphylococcus aureus (25923)	Inhibited	-

Precautions :	1. For Laboratory Use.
	2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.
Limitations :	1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.
Use :	For rapid identification of Cryptococcus neoformans.
Storage :	Dehydrated medium- below 30°C Prepared medium– Between 2 to 8°C.
Packing :	500 gm bottle

Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B962	33.7g/l	14.83L	6.5 ± 0.2	chloramphenicol	121^{0}C / 15 minutes

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