TM 2341 - STAIBS MEDIUM (BIRD SEED AGAR)

INTENDED USE

For selective isolation and differentiation of *Cryptococcus neoformans* from other *Cryptococcus* species and yeasts.

PRODUCT SUMMARY AND EXPLANATION

Cryptococcus neoformans is an encapsulated yeast-like fungus that can live in both plants and animals. This species, also known by its teleomorph name, *Filobasidiella neoformans*, belongs to the broad class of organisms called "club fungi" or division Basidiomycota, which is one the five major types of fungi. *C.neoformans* usually grows as a yeast (unicellular) and replicates by budding. Staibs Medium (Bird Seed Agar) is formulated for selective isolation and differentiation of *C. neoformans* from other *Cryptococcus* species and other yeasts. This media is formulated by Staib and Shields and Ajello.

COMPOSITION

Ingredients	Gms / Ltr
Guizotia abyssinica seeds	70.000
Creatinine	0.780
Dextrose (Glucose)	10.000
Chloramphenicol	0.050
Agar	20.000

PRINCIPLE

Guizotia abyssinica seeds, creatinine and dextrose provide nutrients for the growth of *C. neoformans.* Chloramphenicol inhibits the bacteria as well as rapidly growing moulds that often overgrow the slow-growing dimorphic fungi.

INSTRUCTION FOR USE

- Dissolve 10.08 grams in 99 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C and add 100 mcg diphenyl per ml of medium (1 ml of sterile 1% w/v aqueous solution of diphenyl).
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Light yellow to light brown hygroscopic soft lumps which can be easily broken down to powder.

Appearance of prepared medium : Medium amber coloured opalescent gel forms in Petri plates.

pH (at 25°C) : 6.7±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Color of the colony	Incubation Temperature	Incubation Period

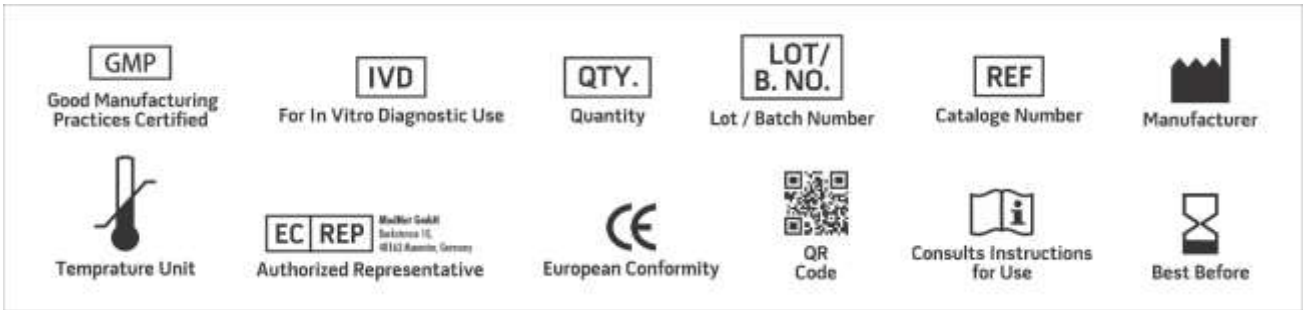
Cryptococcus neoformans	32045	50-100	Good	40-50%	Brownish yellow pigment	30°C	2 weeks
Staphylococcus aureus subsp. *aureus*	25923	>=10^3	Inhibited	0%	-	30°C	2 weeks

PACKAGING:
In pack size of 100 gm bottles.

STORAGE
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL
After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES
1. Casadevall A, Perfect J. R., 1998, Cryptococcus neoformans, ASM Press, Washington, D.C.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
4. MacFaddin J. F., 2000, Biochemical Tests for Identification of Medical Bacteria, 3rd Ed., Lippincott, Williams and Wilkins,Baltimore.
5. Shields A. B. and Ajello L., 1966, Science, 151, 208
6. Staib F., 1962, Med. Microbiol. Immunol., 148,466



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.
***For Lab Use Only**
Revision: 08 Nov., 2019