

CRYPTOCOCCUS DIFFERENTIAL AGAR

IVD in Class A, EU Reg. 2017/746

 For in vitro diagnostic use **IVD**

Recommended for a differentiation of Cryptococcus species.

PRINCIPLE

Cryptococcus is the etiological agent of cryptococcosis, a systemic mycosis of humans and animals with a worldwide distribution. Cryptococcosis (earlier called European blastomycosis) commonly starts following inhalation of the organism, which is considered opportunistic infections as it affects mainly immunosuppressed individuals.

Glucose supports growth as well as strong pigment production by nearly all *C. gattii* strains. *C. gattii* can while *C. neoformans* cannot assimilate D-tryptophan, thereby producing a brown diffusible pigment. Pigmentation is not apparent on the first day of growth but is usually noticeable after 5 days of incubation, intensity gradually increases with time after 2-3 weeks. Glycine serves as a sole source of carbon and nitrogen which is utilized by *Cryptococcus gattii*, *Cryptococcus laurentii* and not by *Cryptococcus neoformans*. Salts in the medium help in pigment induction by D-tryptophan. Pigment production was more intense at 25-30°C as compared to 37°C. Dyes in media for the isolation of fungi have not been commonly utilized, although many such media are available for the isolation of bacteria. Trypan blue in the medium allows suspected *C. neoformans* colonies to be subcultured before mold overgrowth becomes a problem.

COMPOSITION	g/L
Dextrose (Glucose)	20.000
Glycine	0.500
D-Tryptophan	2.000
Potassium dihydrogen phosphate	4.000
Magnesium sulphate	2.500
Thiamine hydrochloride	0.005
Trypan Blue	0.030
Agar	15.000

Final pH 5,4 ± 0,2 at 25°C

WARNING AND PRECAUTIONS

For in vitro diagnostic use.

Observe the precautions normally taken when handling laboratory reagents.

Prepared Medium: The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous.

Safety Data Sheet is available on request for professional users. All waste must be disposed of according to local directives.

STORAGE AND STABILITY

Prepared medium: 10-25°C

The product is stable until the expiration date indicated on the label under the recommended storage conditions.

PREPARATION

Prepared medium (bottles): Melt the content of the bottle in a water bath at 100°C until completely dissolved. Then screw the cap and check the homogeneity of the dissolved medium, if it is the case turning the bottle upside down. Cool at 45-50°C, mix well avoiding foam formation and aseptically distribute into Petri dishes.

QUALITY CONTROL

Prepared medium: Light blue coloured, opalescent gel with white precipitate forms in Petri plates

Typical response after incubation at 25-30°C for 5-6 days:

MICROORGANISM	GROWTH
<i>Cryptococcus neoformans</i> ATCC 32045	Good/Light blue, dry colony
<i>Cryptococcus laurentii</i> ATCC 18803	Good/Brown, Dry colony
<i>Cryptococcus gattii</i> ATCC MYA-4566	Good/Brown, Mucoïd colony

REFERENCES

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PRESENTATION	Packaging	REF.
Prepared medium: CRYPTOCOCCUS DIFFERENTIAL AGAR	12 x 200 mL bottles	70040

SYMBOLS

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| | Read the instructions | | Biological hazard |
| | CE Mark (product complies with the requirements of Regulation (EU) 746/2017) | | |
| | Temperature limitation | | Use by |
| | For in vitro diagnostic use | | Manufacturer |