TM 1517 – CANDIDA AGAR

INTENDED USE

For isolation and differentiation of *Candida albicans.*

PRODUCT SUMMARY AND EXPLANATION

Candidiasis is an acute or sub-acute infection caused by members of the genus *Candida*, mainly *Candida albicans*, although all species may be pathogenic. *C. albicans* produce lesions in the mouth, oesophagus, genitourinary tract, skin, nails, bronchi, lungs and other organs in patients whose normal defense mechanism may have been altered by underlying disease, antimicrobial therapy or immunosuppressive agents. Since saprophytic yeast are microscopically similar to the pathogenic species, all infected material should be cultured on duplicate sets of media with and without antifungal agents.

Candida Agar was developed as described by Fung and Liang, which is a modification of Yeast and Mould Agar. It is a nutritionally rich medium, which supports the growth of many yeasts and moulds and is differential for *C. albicans*. Goldschmidt demonstrated that YM agar with aniline blue could be used to identify *C. albicans* with high accuracy and predictability. Aniline blue is a fluorescent indicator, metabolized by *C. albicans* to produce a fluorescent moiety that can be easily detected under UV light.

Some strains of *C. parapsilosis*, *C. krusei* and *C. pulcherrima* may give slight fluorescence and that may be distinguished from *C. albicans* by germ tube formation. Specimen is processed and inoculated directly onto the surface of the media.

COMPOSITION

Ingredients	Gms / Ltr
Yeast extract	3.000
Malt extract	3.000
Peptic digest of animal tissue	5.000
Dextrose	10.000
Aniline blue	0.100
Agar	20.000

PRINCIPLE

Peptic digest of animal tissue, yeast extract and malt extract in the medium provide nitrogen, carbon, vitamins, and other essential nutrients required for the growth of *C. albicans*. Dextrose is an energy source. Aniline blue is a fluorescent indicator.

INSTRUCTION FOR USE

- Dissolve 41.1 grams in 1000 ml distilled water.
- Heat to boiling with frequent agitation to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Light yellow to pink homogeneous free flowing powder.
Appearance of prepared medium : Bluish green coloured, clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C) : 6.2±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Fluorescence	Incubation Temperature	Incubation Period
Bacillus subtilis	6633	50-100	Good-luxuriant	>=50%	Negative reaction, no fluorescence	25-30°C	24-48 Hours
Candida albicans	10231	10-100	Good-luxuriant	>=50%	Positive reaction, yellow-green fluorescence	25-30°C	24-48 Hours
Candida krusei	24408	10-100	Good-luxuriant	>=50%	Variable reaction	25-30°C	24-48 Hours
Candida tropicalis	1369	10-100	Good-luxuriant	>=50%	Variable reaction	25-30°C	24-48 Hours
Escherichia coli	8739	50-100	Luxuriant	>=70%	Negative reaction, no fluorescence	25-30°C	24-48 Hours

PACKAGING:

In pack size of 500 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.

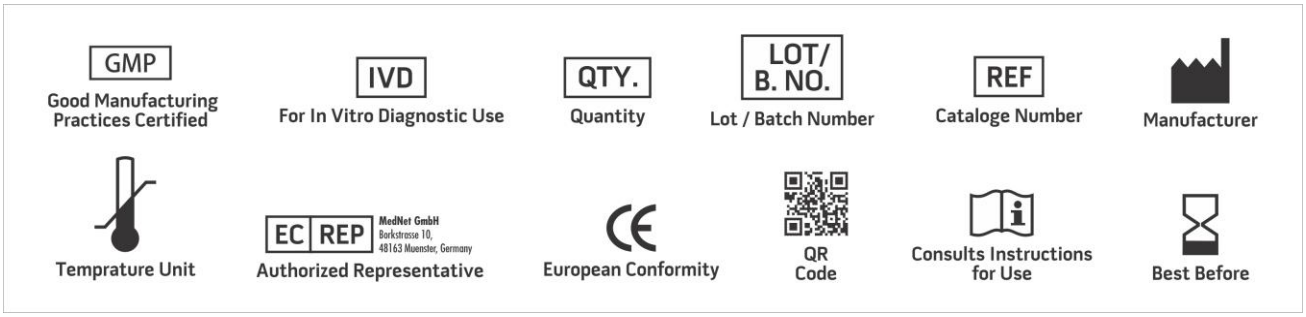
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Utz J. P., 1967, Med. Clin. North Am. 51:519-527
2. Fung and Liang, 1988, Bull Inf. Lab. Serv. Vet (France), 39/30:1
3. Goldschmidt, Fung, Grant White and Brown, 1991, J. Clin. Microbiol., 29:1095.
4. Murray P. R., Baron J. H., Pfaller M. A., Tenover F. C., and YolkenR. H., (Eds.), 1999, Manual of Clinical Microbiology, 7th Ed. American Society for Microbiology, Washington, D.C.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

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