TM 2113 – CHROMOGENIC CANDIDA DIFFERENTIAL AGAR BASE

INTENDED USE

Selective and differential medium for rapid isolation and identification of *Candida* species from mixed cultures.

PRODUCT SUMMARY AND EXPLANATION

Perry and Miller reported that *Candida albicans* produces an enzyme b -N-acetyl- galactosaminidase and according to Rousselle et al incorporation of chromogenic or fluorogenic hexosaminidase substrates into the growth medium helps in identification of *C.albicans* isolates directly on primary isolation. Chromogenic Candida Differential Agar Base incorporates two chromogenes X-NAG which detects the activity of hexosaminidase and BCIP which detects phosphatase activity. Chromogenic Candida Differential Agar Base is a selective and differential medium, which facilitates rapid isolation of yeasts from mixed cultures and allows differentiation of Candida species namely *C.albicans, C.krusei, C.tropicalis and C.glabrata* on the basis of colouration and colony morphology. On this medium results are obtained within 48 hours and it is useful for the rapid and presumptive identification of common yeasts in Mycology and Clinical Microbiology Laboratory.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	4.000
Chromogenic mix	13.600
Agar	13.600

PRINCIPLE

Peptone provides nitrogenous, carbonaceous compounds and other essential growth nutrients. Chloramphenicol from the supplement suppresses the accompanying bacterial flora. *C.albicans* appear as light green coloured smooth colonies, *C.tropicalis* appear as blue to metallic blue coloured raised colonies. *C.glabrata, C.kefyr, C.parapsilosis* colonies appear as cream to white, beige/yellow due to natural pigmentation and some alkaline phosphatase activity, while *C.krusei* appear as pink-purple, fuzzy, dry colonies.

INSTRUCTION FOR USE

- Dissolve 15.6 grams in 500 ml distilled water.
- Add the rehydrated contents of one vial of Chromogenic Candida Differential Selective Supplement.
- Heat to boiling with frequent agitation to dissolve the medium completely. Do not autoclave.
- Cool to 45-50°C.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to beige homogeneous free flowing powder
Appearance of prepared medium	: Light amber coloured, opaque gel forms in Petri plates
pH (at 25°C)	: 6.0 ± 0.2

INTERPRETATION

Cultural characteristics with added Chromogenic Candida Differential Selective Supplement after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Color of the colony	Incubation Temperature	Incubation Period
Candida albicans	10231	50-100	Good - luxuriant	>= 50%	Light green	20-25°C	40-48 Hours
Candida krusei	24408	50-100	Good - luxuriant	>= 50%	Purple, fuzzy	20-25°C	40-48 Hours
Candida tropicalis	750	50-100	Good - luxuriant	>= 50%	Blue to purple	20-25°C	40-48 Hours
Candida kefyr	66028	50-100	Good - luxuriant	>= 50%	Cream to white	20-25°C	40-48 Hours
Candida parapsilosis	22019	50-100	Good - luxuriant	>= 50%	Cream to white	20-25°C	40-48 Hours
Candida glabrata	15126	50-100	Good - luxuriant	>= 50%	Cream to white	20-25°C	40-48 Hours
Escherichia coli	8739	$>=10^3$	Inhibited	0%		20-25°C	40-48 Hours
Escherichia coli	25922	$>=10^3$	Inhibited	0%		20-25°C	40-48 Hours

PACKAGING:
In pack size of 100 gm and 500gm bottles.

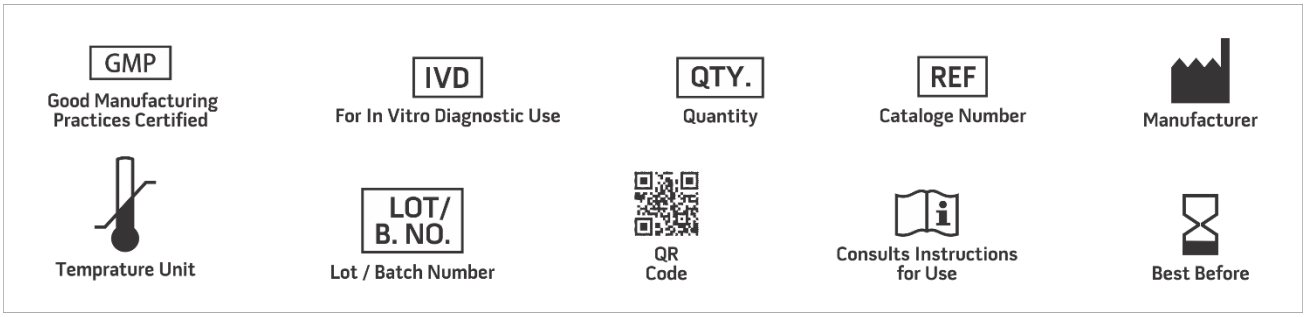
STORAGE
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 2-8°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space 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. Perry J. L. and Miller G. R., 1987, J. Clin. Microbiol., 25: 2424 -2425.
2. Rousselle P., Freydiere A., Couillerot P., de Montclos H. and GilleY., 1994, J. Clin. Microbiol. 32:3034-3036



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

***For Lab Use Only**

Revision: 08 Nov., 2019