TM 064 – CHOCOLATE AGAR BASE

INTENDED USE

For isolation and cultivation of fastidious microorganisms like *Neisseria gonorrhoeae.*

PRODUCT SUMMARY AND EXPLANATION

Neisseria gonorrhoeae is a gram-negative bacteria and the causative agent of gonorrhea, however it is also occasionally found in the throat. The cultivation medium for gonococci should ideally be a rich nutrients base with blood, either partially lysed or completely lysed. The diagnosis and control of gonorrhea have been greatly facilitated by improved laboratory methods for detecting, isolating and studying *N. gonorrhoeae*.

Chocolate Agar Base, with the addition of supplements, gives excellent growth of the gonococcus without overgrowth by contaminating organisms. G.C. Agar can also be used in place of Chocolate Agar Base, which gives slightly better results than Chocolate Agar. The diagnosis and control of gonorrhea have been greatly facilitated by improved laboratory methods for detecting, isolating and studying *N. gonorrhoea*.

Interest in the cultural procedure for the diagnosis of gonococcal infection was stimulated by Ruys and Jens, Mcleod and co-workers, Thompson, Leahy and Carpenter, Carpenter, Leahy and Wilson and Carpenter, who clearly demonstrated the superiority of this method over the microscopic technique. Chocolate Agar Base with addition of supplement not only supports the growth of the gonococcus in pure culture but also permits its development from the mixed flora encountered in chronic gonococcal infections. Carpenter reported that this medium and Haemoglobin is useful for cultural detection of the gonococcus.

COMPOSITION

Ingredients	Gms / Ltr
Proteose peptone	20.000
Dextrose (glucose)	0.500
Sodium chloride	5.000
Disodium hydrogen phosphate	5.000
Agar	15.000

PRINCIPLE

The medium contains proteae peptone and dextrose which acts as a source of energy. Sodium chloride helps in maintaining osmotic balance and agar acts as a solidifying agent.

INSTRUCTION FOR USE

- Dissolve 45.5 grams in 495 ml purified/ 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.
- Aseptically add equal amount (495 ml) of sterile 2% Haemoglobin solution.
- Also add the contents or one vial of Yeast Autolysate Supplement or Vitamino Growth Supplement reconstituted as directed.
- Mix well before pouring. When single strength medium is desired, suspend 45.5 grams in 1000 ml distilled water.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Basal medium: Light amber coloured clear to slightly opalescent gel. After addition of haemoglobin: Chocolate brown coloured opaque gel forms in Petri plates.
pH (at 25°C) : 7.3±0.2

INTERPRETATION

Cultural characteristics observed after incubation with added 2% haemoglobin solution,Yeast autolysate Supplement or Vitamino Growth Supplement.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Neisseria gonorrhoeae	19424	50-100	Luxuriant	>=70%	35-37°C	40-48 Hours
Neisseria meningitidis	13090	50-100	Luxuriant	>=70%	35-37°C	40-48 Hours
Streptococcus pneumoniae	6303	50-100	Luxuriant	>=70%	35-37°C	40-48 Hours
Streptococcus pyogenes	19615	50-100	Luxuriant	>=70%	35-37°C	40-48 Hours
Haemophilus influenzae	19418	50-100	Luxuriant	>=70%	35-37°C	40-48 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

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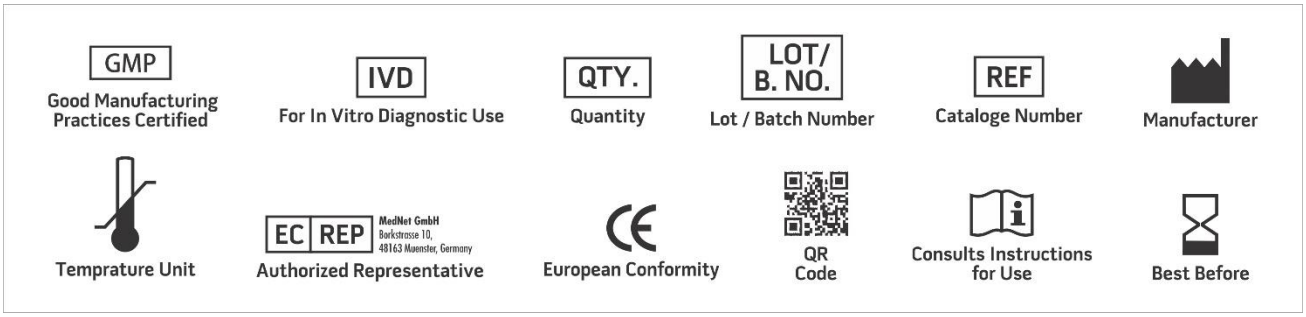
7. McLeod J. W., Cootes J. C., Happold F. C., Priestely D. P., Wheatley B., 1934, J. Path. Bacteriol., 39:221.



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

***For Lab Use Only**

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