

CM 20748 - GC AGAR BASE (VEG.)

INTENDED USE

For selective isolation and cultivation of Gonococci.

SUMMARY AND EXPLANATION

G.C.Veg Agar Base with added blood or haemoglobin and other supplements is recommended for selective isolation and cultivation of fastidious organisms like Gonococci and Haemophilus species. This medium can also be employed as a basal medium in the preparation of Chocolate Veg Agar and Thayer Martin Veg Medium Base. Originally, animal based Chocolate Agar was developed by Johnston for the growth of fastidious Neisseria gonorrhoeae within 24 hours. Addition of haemoglobin to this medium had improved the growth, as studied by Carpenter and Morton. Incubation is to be done at 37°C in an atmosphere of 5-10% carbon dioxide and 70% humidity. It is recommended that all presumptive Neisseriae should also be confirmed by carbohydrate fermentation tests and other serological tests.

COMPOSITION

Ingredients	Gms / Ltr
Veg special peptone	15.00
Corn starch	1.00
Dipotassium phosphate	4.00
Monopotassium phosphate	1.00
Sodium chloride	5.00
Agar	10.00

PRINCIPLE

Veg Agar Base contains Veg special peptone which supplies nutrients to the organisms. The presence of starch ensures that the toxic metabolites produced by Neisseria are neutralized and the phosphates prevent changes in the pH due to amine production that can affect the survival of the organisms. X-factor needed for Haemophilus species is provided by haemoglobin. The other supplement provides V factor i.e. NAD (Nicotinamide adenine dinucleotide) for Haemophilus species and amino acids, coenzymes, ferric ions etc. improves the growth of pathogenic Neisseria.

INSTRUCTION FOR USE

Suspend 7.2 grams in 100 ml distilled water to make a double strength base.
Heat to boiling to dissolve the medium completely.
Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
Cool to 50°C and aseptically add separately prepared Haemoglobin (100 ml sterile 2% solution) and GC Supplement.
Mix well and pour into sterile petri plates.
To increase the selectivity of medium antibiotic supplements may be added as VCN Supplement, VCNT Supplement, Linco T Supplement, Vanclo T Supplement. To enhance the nutritional properties of medium, Vitamino Growth Supplement or Yeast Autolysate Supplement may be added.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Basal medium: Light yellow coloured clear to slightly opalescent gel. After addition of Haemoglobin: Chocolate brown coloured opaque gel forms in Petri plates.
pH (at 25°C) : 7.2 ± 0.2



INTERPRETATION

Cultural characteristics observed in presence of 5-10% Carbon dioxide (CO₂) and 70% humidity with added sterile 2% Haemoglobin and GC Supplement with antibiotics, after an incubation.

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

PACKAGING:

In pack size of 100 gm and 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°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.

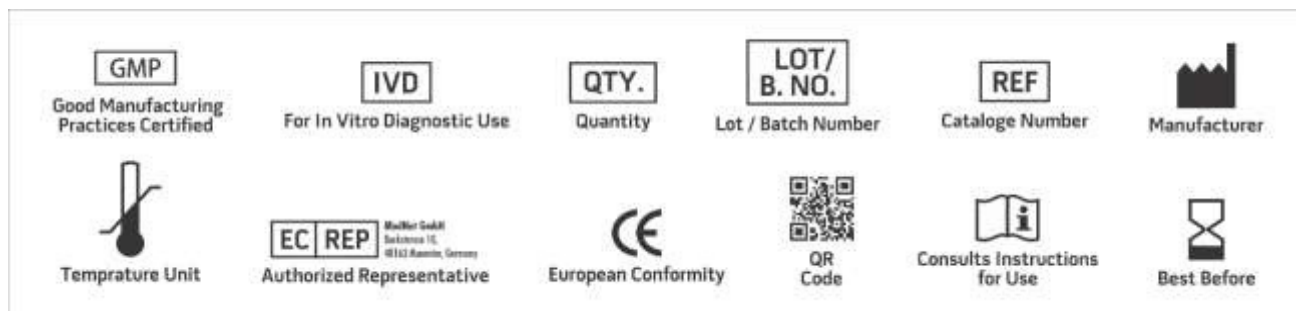
DISPOSAL

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

REFERENCES

1. Carpenter C. M. and Morton H. E., 1947, Proc. N.Y. State Assoc. Public Hlth. Lab., 27:58
2. Johnston J., 1945, J. Vener. Dis. Inform., 26:239.





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

*For LabUse Only