TM 916 – WILKINS CHALGREN ANAEROBIC BROTH BASE

INTENDED USE

For cultivation and susceptibility testing of anaerobic bacteria.

PRODUCT SUMMARY AND EXPLANATION

Wilkins Chalgren Anaerobic Broth Base, formulated by Wilkins and Chalgren, is the preferred medium for susceptibility testing of anaerobes. This medium is also recommended for testing anaerobic bacteria. Wilkins Chalgren Anaerobic Broth Base is similar to the agar medium, except the agar. The broth medium is especially useful in the broth micro-dilution tests. Wilkins Chalgren Broth media need to be appropriately supplemented to support the growth of certain anaerobic bacteria. Hemin and Menadione (Vitamin K3) enhances the growth of *Bacteroides* species and *Prevotella melaninogenica*, respectively and many other species of gram-negative anaerobic rods. The medium can also be supplemented with defibrinated or lysed blood for the growth of fastidious anaerobic bacteria.

COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	10.000
Peptic digest of animal tissue	10.000
Yeast extract	5.000
Dextrose	1.000
Sodium chloride	5.000
L-Arginine	1.000
Sodium pyruvate	1.000
Hemin	0.005
Menadione	0.0005

PRINCIPLE

The medium consists of Peptic digest of animal tissues and casein enzymic hydrolysate that serve as sources of essential nutrients including carbon and nitrogen. Yeast extract provides vitamins and other growth factors like purines and pyrimidines that are essential for the growth of *P.melaninogenica* . Arginine serves as an amino acid source while pyruvate serves as an energy source. The medium can be made selective for non-sporing anaerobic bacteria and gram-negative anaerobic bacteria by addition of NonSpore Anaerobic Supplement and G. N. Spore Anaerobic Supplement respectively.

INSTRUCTION FOR USE

- Dissolve 33.0 grams in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 50°C before adding antibiotics to be tested.
- Mix gently and dispense into sterile tubes.
- For cultivation of anaerobes, aseptically add the rehydrated contents of 2 vials each of Non-Spore Anaerobic Supplement or G. N. Spore Anaerobic Supplement as desired to the sterile molten medium before dispensing into sterile tubes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Medium amber coloured clear solution in tubes.
pH (at 25°C) : 7.1 ± 0.2

INTERPRETATION

Cultural characteristics observed with added Non-spore Anaerobic Supplement or G.N.Spore Anaerobic Supplement under anaerobic condition after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Bacteroides fragilis	25285	50-100	Luxuriant	35-37°C	48 Hours
Clostridium perfringens	12924	50-100	Luxuriant	35-37°C	48 Hours
Escherichia coli	25922	>=10^3	Inhibited	35-37°C	48 Hours
Prevotella melaninogenicus	15930	50-100	Luxuriant	35-37°C	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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3. Clinical and Laboratory Standards Institute, 2006, Methods for Antimicrobial Susceptibility Testing of Anaerobic Bacteria, Approved standard M11-A3, CLSI, Villanova, Pa.

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5. Gibbons R. J. and MacDonald J. B., 1960, J. Bacteriol., 80:164.
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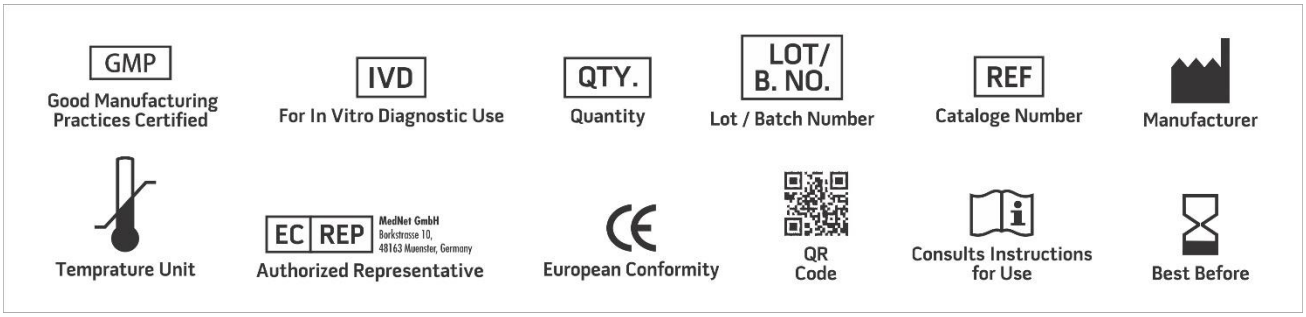

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

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