TM 915 – WILKINS CHALGREN ANAEROBIC AGAR BASE

INTENDED USE

For isolation, cultivation and susceptibility testing of anaerobes by agar dilution method.

PRODUCT SUMMARY AND EXPLANATION

Wilkins Chalgren Anaerobic Agar Base, formulated by Wilkins and Chalgren, along with Brucella Agar Base is the preferred medium for agar dilution tests with anaerobes. This medium is also recommended for testing anaerobic bacteria. Wilkins Chalgren Agar 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.

Anaerobic bacteria are widespread in soil, marshes, lake and river sediments, oceans, sewage, food and animals. In humans, anaerobic bacteria normally are prevalent in the oral cavity around the teeth, in the gastrointestinal tract, in the orifices of the genitourinary tract and on the skin. Anaerobic infections in humans and various animals can involve virtually any organ under immunocompromised conditions.

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
Agar	10.000

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 43.0 grams in 1000 ml purified/distilled water.
- Heat to boiling 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 pour into sterile Petri plates.
- 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 pouring into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Medium amber coloured clear to slightly opalescent gel forms in Petri plates.
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	Recovery	Incubation Temperature	Incubation Period
Bacteroides fragilis	25285	50-100	Luxuriant	>=70%	35-37°C	48 Hours
Clostridium perfringens	12924	50-100	Luxuriant	>=70%	35-37°C	48 Hours
Escherichia coli	25922	$>=10^3$	Inhibited	0%	35-37°C	48 Hours
Prevotella melaninogenicus	15930	50-100	Luxuriant	>=70%	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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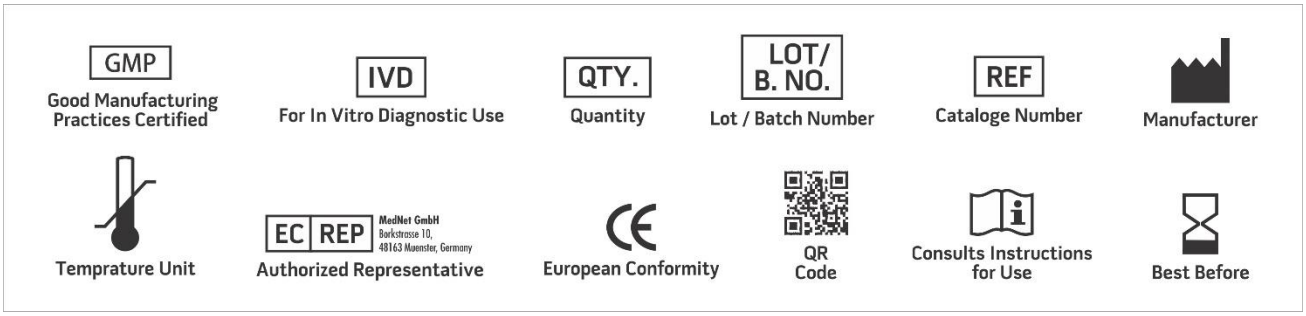

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

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