TM 1545 - GBS MEDIUM BASE

INTENDED USE

For fast detection of group B Streptococci in pathological samples.

PRODUCT SUMMARY AND EXPLANATION

Beta-haemolytic Streptococci with Lancefield group B antigen (*Streptococcus agalactiae)* are an important cause of serious neonatal infection characterized by sepsis and meningitis. Heavy colonization of the maternal genital tract is associated with colonization of infants and risk of neonatal disease. GBS Medium, formulated by Islam is recommended for the isolation and detection of group B Streptococci (GBS) from clinical specimens. GBS Medium is designed to exploit the ability of most Group B Streptococci (GBS) to produce orange /red pigmented colonies when incubated under anaerobic conditions. The orange red pigment of group B Streptococci also has the characteristic of a carotenoid. GBS Medium Base also supports growth of other genital bacteria that cause perinatal infections, e.g. anaerobic *Streptococcus, Bacteroides* and *Clostridium* species.

COMPOSITION

Ingredients	Gms / Ltr
Proteose peptone	23.000
Sodium dihydrogen phosphate	1.500
Disodium hydrogen phosphate	5.750
Starch, soluble	80.000

PRINCIPLE

Proteose peptone provides the necessary nutrients for the growth of Group B Streptococci. The phosphate salts buffer the medium. The antibiotic supplement makes the medium selective for Group B Streptococci, while the horse serum enriches the media. Colonies of Group B Streptococci are 0.5 to 1 mm in diameter, round, entire and give pigmented growth (orange/red) after 24-48 hours' anaerobic incubation. Other organisms that can grow on this medium do not produce the orange/red pigment. Vaginal or rectal swabs should be inserted vertically into the medium. Incubation is carried out at 35-37°C. Pigment production is observed at hourly interval. Colour change (due to pigment production) of the butt occurs gradually, starting from the bottom of the tube towards the upper end. Presence of blood in the specimen may give false positive results.

INSTRUCTION FOR USE

- Dissolve 55.12 grams in 475 ml purified/distilled water.
- Dissolve completely by gently heating to boiling for 15-20 minutes.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
- Cool to 60°C and aseptically add 25 ml sterile inactivated Horse serum and sterile rehydrated contents of 1 vial of GBS Supplement.
- Mix well and dispense into sterile test tubes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to beige homogeneous free flowing powder.
Appearance of prepared medium : Light amber coloured, clear to slightly opalescent solution with slight precipitate on low temperature.
pH (at 25°C) : 7.5±0.2

INTERPRETATION

Cultural characteristics observed with added inactivated Horse serum and GBS Supplement after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Pigmentation	Incubation Temperature	Incubation Period
Bacteroides fragilis	25285	50-100	Fair to good	No pigmentation	35-37°C	24-48 Hours
Streptococcus agalactiae	13813	50-100	Good-luxuriant	Orange/red	35-37°C	24-48 Hours
Enterococcus faecalis	29212	50-100	Good-luxuriant	No pigmentation	35-37°C	24-48 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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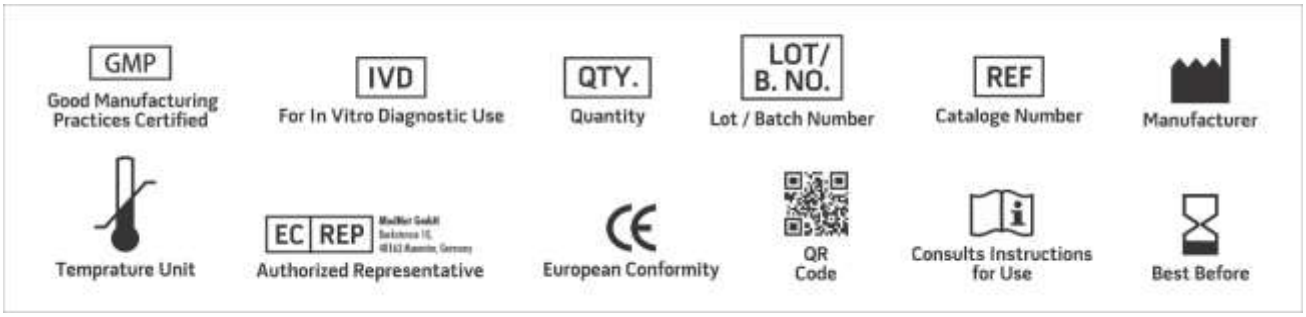
5. Merrit K. and Jacobs N. J. 1978, J. Clin. Microbiol. 8, 105-7.
6. Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Yolken R. H., (Eds.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.



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

***For Lab Use Only**

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