

Technical Information

Anaerobic Blood Agar Base

Product Code: DM 2345

Application: - Anaerobic Blood Agar Base is recommended for isolation and cultivation of Group A and Group B Streptococci from throat cultures and other clinical specimens.

Composition**

Ingredients	Gms / Litre
Casein enzymic hydrolysate	14.500
Papaic digest of soyabean meal	5.000
Sodium chloride	5.000
Growth Factors	1.500
Agar	14.000
Final pH (at 25°C)	7.3±0.2

**Formula adjusted, standardized to suit performance parameters

Principle & Interpretation

Group B streptococcus infection is a common bacterial infection that is a life-threatening problem in newborns. Group A Streptococci commonly causes tonsillitis and rarely, responsible for deadly destruction of flesh. Anaerobic Blood Agar Base with Neomycin Supplement is used for the isolation of Group A and Group B Streptococci from clinical specimens ⁽¹⁾. This medium was originally formulated by Blanchette and Lawrence ⁽²⁾, but addition of the antibiotic Neomycin to sheep blood agar improved the detection of Group A & B Streptococci, by inhibiting the growth of the other accompanying haemolytic organisms. Casein enzymic hydrolysate and papaic digest of soyabean meal in the medium provide carbon and nitrogenous compounds. Growth factors and defibrinated sheep blood together supply enrichment for growth of fastidious organisms. Sodium chloride helps in maintaining the osmotic equilibrium. Addition of Neomycin supplement (MS 2149) helps to suppress the normal flora thereby enhancing recovery of Group A and Group B Streptococci from clinical samples.

Methodology

Suspend 40 grams of powder media in 990 ml distilled water. Shake well & heat to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Aseptically add rehydrated contents of 1 vial of Neomycin Supplement MS (MS 2149), and 5% v/v sterile defibrinated sheep blood. Mix well and pour into sterile Petri plates.

Quality Control

Physical Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.4% Agar gel.

Colour and Clarity of prepared medium

Basal medium: Yellow coloured clear to slightly opalescent gel. After addition of 5%v/v sterile defibrinated blood : Cherry red coloured , opaque gel forms in Petri plates

Reaction

Reaction of 4.0% w/v aqueous solution at 25°C. pH : 7.3±0.2

