HiCromeη Strep B Selective Agar Base

M1840

Intended use

HiCrome™ Strep B Selective Agar Base is recommended for selective isolation of Group B streptococci from clinical samples.

Composition**

Ingredients	Gms / Litre
Protein hydrolysate	17.500
Buffers	2.500
Chromogenic mixture	2.540
Selective agents	0.110
Agar	15.000
Final pH (at 25°C)	7.3±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 37.65 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE. Cool to 45-50°C and aseptically add the rehydrated contents of one vial of Hicrome™ Strep B Selective Supplement (FD273). Mix well and pour into sterile Petri plates.

Principle And Interpretation

Group B *Streptococcus* is a leading infection causing illness and death in newborns. Group B streptococci can also cause serious diseases in pregnant women, the elderly, and adults with other illnesses. GBS normally reside in the vagina of women and rectum of men and women (1). In newborns, group B strep is the most common cause of sepsis (infection of the bloodstream) and meningitis (infection of the lining and fluid surrounding the brain) and a common cause of pneumonia. In adults, group B strep can rarely lead to serious bloodstream infections, urinary tract infections, skin infections, and pneumonia, especially in people with weak immune systems. Heavy colonization of the maternal genital tract is associated with colonization of infants and risk of neonatal disease (2).

The sample collection is usually done by collection of vaginal and rectal swab between 35 and 37weeks of pregnancy. The swab is then processed on HiCrome™ Strep B Selective Agar Base. For the conventional methods optimum recovery is however achieved by selective enrichment into Todd Hewitt broth with colistin and nalidixic acid and then subculture on Blood Agar (3,4).

Protein hydrolysate provides nitrogeneous and carbonaceous compounds, long chain amino acids and other essential nutrients for the growth of Streptococci. Buffers present provides buffering to the medium. Selective agents in the medium inhibits accompanying flora. One of the substrate in the chromogenic mixture is cleaved by beta glucosidase possesed by Group B Streptococci resulting in blue coloured colonies.

Type of specimen

Clinical samples - Vaginal and rectal samples

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (5,6).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic Use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets

Limitations :

Further biochemical tests must be carried out for confirmation.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Yellow coloured opaque gel forms in Petri plates

Reaction

Reaction of 3.77% w/v aqueous solution at 25°C. pH : 7.3±0.2

Cultural Response

Cultural characteristics observed with added Hicrome Strep B Selective Supplement (FD273), after an incubation at 35-37°C for 24-48 hours.

Organism	Inoculum (CFU)	Growth	Recovery	Colour of Colony
Escherichia coli ATCC 25922 (00013*)	>=10^3	inhibited	0%	-
Neisseria meningitidis ATCC 13090	>=10^3	inhibited	0%	-
Staphylococcus aureus subsp. aureus ATCC 25923 (00034*)	>=10^3	inhibited	0%	-
Streptococcus agalactiae ATCC 13813	50-100	luxuriant	>=50%	blue

*- Corresponding WDCM numbers

Storage and Shelf Life

Store between 2-8°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle inorder to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Use before expiry date on the label.

Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (5,6).

Reference

1.Anthony BF, Okada DM, Hobel CJ. Epidemiology of group B Streptoccoccus: longitudinal observations during pegnancy. J.Infect Dis 1978; 137:524-30.

2.Murray P.R. , Baron J.H., Manual of Clinical Microbiology 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.

3.Prevention of perinatal group B Streptococcal disease: a public health perspective . Centres for Disease control and Prevention. MMWR Recomm Rep 1996; 51:1-22

4.NHS Processing swabs for Group B Streptococcal carriage Issue no.2.1,2006

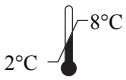
5. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.

6. Jorgensen,J.H., Pfaller , M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

Revision : 01 / 2018

In vitro diagnostic medical device

CE Marking



Storage temperature

Do not use if package is damaged

HiMedia Laboratories Pvt. Limited,
23 Vadhani Industrial Estate,
LBS Marg,Mumbai-86,MS,India

CE Partner 4U ,Esdoornlaan 13, 3951
DB Maarn The Netherlands,
www.cepartner 4u.eu