56921 Strep B *ChromoSelect* Selective Agar Base

Strep B *ChromoSelect* Selective Agar Base is recommended for selective isolation of Group B streptococci.

Composition:

Ingredients	Grams/Litre
Protein hydrolysate	17.5
Buffers	2.5
Chromogenic mixture	2.54
Selective agents	0.11
Agar	15.0
Final pH 7.3 ± 0.2 at 25°C	

Store at 2-8°C and the prepared medium at 2-8°C. Use before expiry date on the label.

Appearance:	Cream to faint beige to yellow, homogeneous, free flowing powder.
Gelling:	Firm
Color and Clarity:	Cream with grey tinge, opaque gel form in Petri plates.

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 Strep B *ChromoSelect* Selective Supplement (Cat. No. 92650). Mix well and pour in sterile Petri plates.

Principle and Interpretation:
Group B streptococci (GBS) are a leading infection causing illness and death in newborns. They 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 Strep B *ChromoSelect* 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 compounds and other essential growth nutrients for the growth of streptococci. Buffers present provides buffering to the medium. Selective agents in the medium inhibit accompanying flora. One of the substrates in the chromogenic mixture is cleaved by beta glucosidase possesed by Group B streptococci resulting in blue coloured colonies. Agar is the solidifying agents in the medium.

Cultural characteristics with Strep B *ChromoSelect* Selective Supplement after 18-24 hours at 35-37°C.

Organisms (ATCC)	Inoculum [CFU]	Growth	Recovery [%]	Colony appearance
Escherichia coli (25922)	$\geq 10^3$	-	0	-
Neisseria meningitidis (13090)	$\geq 10^3$	-	0	-
Staphylococcus aureus (25923)	$\geq 10^3$	-	0	-
Streptococcus agalactiae (13813)	50-100	+++	≥50	Blue

References:

1. B.F. Anthony, D.M. Okada, C.J. Hobel, Epidemiology of group B Streptoccoccus: longitudinal observations during pregnancy, J. Infect. Dis, 137, 524-30 (1978)
2. P.R. Murray, J.H. Baron, Manual of Clinical Microbiology, P.R. Murray, J.H. Baron, M.A. Pfaller, J.H. Jorgensen, R.H. Yolken, (Eds.), Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C. (2003)
3. Prevention of perinatal group B Streptococcal disease: a public health perspective, Centres for Disease control and Prevention, MMWR Recomm. Rep., 51, 1-22 (1996)
4. NHS Processing swabs for Group B Streptococcal carriage Issue no.2.1 (2006)

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.