

Technical Information

KF Streptococcus Broth Base w/ BCP

Product Code: DM 2021

Application: - KF Streptococcus Broth Base w/ BCP is recommended for detection and enumeration of faecal Streptococci.

Composition**

Ingredients	Gms / Litre
Peptic digest of animal tissue	5.000
Casein enzymic hydrolysate	5.000
Yeast extract	10.000
Sodium chloride	5.000
Sodium glycerophosphate	10.000
Maltose	20.000
Lactose	1.000
Sodium azide	0.400
Bromocresol purple	0.015
Final pH (25°C)	7.2±0.2

**Formula adjusted, standardized to suit performance parameters

Principle & Interpretation

Streptococci are spherical, gram-positive cocci and found as normal commensal flora of the mouth, skin, intestine, upper respiratory tract of humans. Streptococci found in the faeces constitute Streptococci with group D Lancefield antigens. The types include *Streptococcus faecalis*, *Streptococcus faecium*, *Streptococcus bovis* and *Streptococcus duran*. They are low-grade pathogens and rarely cause disease. However, they may cause urinary tract infection in catheterized patients; mixed abdominal wound infections following gut surgery; and endocarditis on abnormal valves. Kenner - Faecal (KF) Medium was developed by Kenner et al^(1, 2) for detecting Streptococci in water and food materials.

Peptic digest of animal tissue and casein enzymic hydrolysate together with yeast extract provide nitrogen, carbon, sulphur, amino acids, vitamins and trace ingredients to the faecal Streptococci. Lactose and maltose are the fermentable carbohydrates and therefore serve as energy sources. Sodium azide is a selective agent, which hampers the growth of gram-negative bacteria.

2, 3, 5-Triphenyl Tetrazolium Chloride is reduced to insoluble formazan by actively metabolizing cells, resulting in the formation of pink or red colour. Bacteria resistant to azide, utilize lactose and / or maltose. The acidity so produced changes the colour of the indicator dyes to yellow.

Methodology

Suspend 56.41 grams of powder media in 1000 ml distilled water. Shake well & heat to dissolve the medium completely. DO NOT AUTOCLAVE. Overheating will lower the pH and render the medium less productive. Cool to 50°C and aseptically add 10 ml of 1% 2, 3, 5-Triphenyl Tetrazolium Chloride (TTC) (MS2057) to sterile medium.

Quality Control

Physical Appearance

Cream to greyish yellow homogeneous free flowing powder

Colour and Clarity of prepared medium

Light purple coloured, clear solution in tubes

Reaction

Reaction of 5.64% w/v aqueous solution at 25°C. pH : 7.2±0.2

pH Range 7.00-7.40

Cultural Response/ characteristics

DM 2021: Cultural characteristics observed after an incubation at 35-37°C for 48 - 72 hours.



Dehydrated Culture Media
Bases / Media Supplements

Organism	Inoculum (CFU)	Growth
<i>Escherichia coli</i> ATCC 25922	$\geq 10^8$	inhibited
<i>Enterobacter aerogenes</i> ATCC 13048	$\geq 10^8$	inhibited
<i>Enterococcus faecalis</i> ATCC 29212	50-100	good-luxuriant

Storage and Shelf Life

Dried Media: Store below 30°C in tightly closed container and use before expiry date as mentioned on the label.

Prepared Media: 2-8°C in sealable plastic bags for 2-5 days.

Further Reading

1. Kenner B. A., Clark H. F. and Kabler P. W. 1960, Am. J. Public Health, 50:1553.
2. Kenner B. A., Clark H. F. and Kabler P. W, 1961, Appl. Microbiol., 9:15

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate
- **Central Drug House Pvt. Ltd.** reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.
- Do not use the products if it fails to meet specifications for identity and performance parameters.

