

# KF Streptococcus Agar



Medium used for the isolation and enumeration of Enterococci.

## • CONTENTS (Liter)

|                              |         |
|------------------------------|---------|
| Proteose Peptone             | 10.0 g  |
| Yeast Extract                | 10.0 g  |
| Sodium Chloride              | 5.0 g   |
| Sodium Glycerophosphate      | 10.0 g  |
| Maltose                      | 20.0 g  |
| Lactose                      | 1.0 g   |
| Sodium Azide                 | 0.4 g   |
| Bromocresol Purple           | 0.015 g |
| Agar                         | 20.0 g  |
| Final pH = 7.2 ± 0.2 at 25°C |         |

## • PROCEDURE

Suspend 76.42 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. DO NOT AUTOCLAVE. Aseptically add 2 vials of TTC 1% supplement (MB-T1867). Cool to 45 - 50°C in water bath. Mix well. Pour into petri dishes.

### TTC 1% supplement

1 vial contents (each vial is sufficient for 500mL of medium)

Triphenyl Tetrazolium Chloride (TTC) 0.05 g

## • INTERPRETATION

KF Streptococcus Agar is a medium used for the isolation and enumeration of Enterococci. Proteose peptone and yeast extract provide nitrogen, amino acids, carbon, vitamins in the medium. Sodium chloride maintains the osmotic balance. Sodium Glycerophosphate is used as a source of phosphate. Maltose and lactose are carbohydrates and energy sources. Sodium azide inhibits gram negative bacteria. Bromocresol purple is the pH indicator. Agar is the solidifying agent. Colonies grow red when TTC 1% supplement is added.

## • TECHNIC

Inoculate the plates with spreading the specimen on surface of medium using a sterile loop. Incubate at 35 ± 2°C for 46 - 48 hours. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: greenish-beige

### Prepared medium

Appearance: clear

Color: purple

Incubation conditions: 35 ± 2°C / 46 - 48 hours

| Microorganism                 | ATCC  | Inoculum CFU     | Growth    | Characteristic      |
|-------------------------------|-------|------------------|-----------|---------------------|
| <i>Enterococcus faecalis</i>  | 29212 | 50-100           | good      | red to pink centers |
| <i>Escherichia coli</i>       | 25922 | ≥10 <sup>3</sup> | inhibited | -                   |
| <i>Enterobacter aerogenes</i> | 13048 | ≥10 <sup>3</sup> | inhibited | -                   |

**• STORE**

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2 - 8°C.

**• REFERENCES**

1. Kenner, Clark and Kabler. 1961. Appl. Microbiol. 9:15.
2. Bordner and Winter. 1978. Microbiological methods for monitoring the environment, water and wastes. Environmental Protection Agency, Cincinnati, Ohio.
3. Kelly and Fulton. 1953. Am. J. Clin. Pathol. 23:512.

**• PACKAGE**

|   |       |
|---|-------|
| Cat. No : MB-K2178<br>KF Streptococcus Agar | 500 G |
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