

TM 2069 – ENTEROCOCCUS AGAR BASE

INTENDED USE

For selective isolation and differentiation of *Enterococcus faecalis* and *Enterococcus faecium*.

PRODUCT SUMMARY AND EXPLANATION

Enterococci were formerly classified as faecal streptococci. Enterococci serves as an indicator organism in monitoring food samples as it is cause of faecal contamination. Of the various species of Enterococci, *E.faecalis* and *E.faecium* are frequently found in humans. The presence of Enterococci in food samples has been studied. A variety of selective media have been recommended for the isolation of *Enterococcus* species. This medium is designed for the selective isolation and differentiation between *Enterococcus faecalis* and *Enterococcus faecium*.

The differentiation is based depending upon the reduction of tetrazolium. *Enterococcus faecalis* produces colonies with a deep red center and a narrow white periphery with yellow background, whereas *Enterococcus faecium* produces white or pale pink coloured colonies.

COMPOSITION

Ingredients	Gms / Ltr
BHI powder	8.500
Peptone	10.000
Beef extract	8.500
Dipotassium hydrogen phosphate	2.500
Sodium azide	0.250
Dextrose (Glucose)	10.000
Bromo thymol blue	0.020
Agar	15.000

PRINCIPLE

The medium consists of Proteose peptone, BHI powder and HM Peptone B serves as a source of nitrogen and vitamins. Dextrose (Glucose) serves as a source of carbohydrate and bromothymol blue is the pH indicator. Sodium azide helps in inhibition of contaminating flora.

INSTRUCTION FOR USE

- Dissolve 54.77 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15psi pressure (121°C) for 15 minutes. Cool to 45-50°C.
- Aseptically add rehydrated contents of one vial of TTC solution 1%.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Light yellow to pale green coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C) : 7.2 ± 0.2

INTERPRETATION

Cultural characteristics observed with added TTC Solution 1% after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
<i>Enterococcus faecalis</i>	29212	50-100	Luxuriant	>=50%	Red or maroon	25-30°C	68-72 Hours
<i>Enterococcus faecium</i>	19434	50-100	Luxuriant	>=50%	Colourless to pale pink	25-30°C	68-72 Hours
<i>Escherichia coli</i>	25922	>=10 ⁴	Inhibited	0%	-	25-30°C	68-72 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 10-25°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.













DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

- Devriese, L.A., Pot, B., Van Damme, L., Kersters, K and Haesebrouk, F. (1995) Identification of Enterococcus species isolated from food of animal origin. Int. J. Food Microbiol. 26, 187-197.
- Domig, K.J., Mayer, H.K. and Kneifel, W (2003a) Methods used for isolation, enumeration, characterization and identification of Enterococcus species.1. Media for isolation and enumeration. Int.J.Food Microbiol.88 147-164.
- Knudtson, L.M. and Hartman, P.A. (1993) Enterococci in pork processing. J.Food Prot. 56, 6-9.



 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Buckstrasse 10, 49163 Muenster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
Revision: 01 Nov., 2023