

## TM 2070 – ENTEROCOCCUS DIFFERENTIAL AGAR BASE (TITG 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.

Enterococcus Differential Agar Base was 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 centre and a narrow white periphery, whereas *Enterococcus faecium* produces white or pale pink coloured colonies.

### COMPOSITION

Ingredients	Gms / Ltr
Proteose peptone	10.000
Beef extract	8.000
Dextrose (Glucose)	10.000
Thallium (I) acetate	1.000
Agar	14.000

### PRINCIPLE

The medium consists of Proteose peptone and Beef extract which serves as a source of nitrogen, carbon, long chain amino acids and vitamins. Glucose serves as a source of carbohydrate. The medium incorporates thallium acetate as a selective inhibitory agent.

### INSTRUCTION FOR USE

- Dissolve 43.0 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 coloured clear to slightly opalescent gel forms in Petri plates.
- pH (at 25°C)** : 6.05 ± 0.05

### INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
<i>Enterococcus faecalis</i>	29212	50-100	Good-luxuriant	>=50%	Red or maroon	35-37°C	18-24 Hours
<i>Escherichia coli</i>	25922	>=10 <sup>4</sup>	Inhibited	0%	-	35-37°C	18-24 Hours
<i>Enterococcus faecium</i>	19434	50-100	Good-luxuriant	>=50%	Colourless	35-37°C	18-24 Hours
<i>Lactococcus lactis</i>	19435	>=10 <sup>4</sup>	Inhibited	0%	-	35-37°C	18-24 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 25-30°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**

1. Barnes, E.M. (1956) Methods for the isolation of faecal streptococci (Lancefield group D) from bacon factories. J. Appl. Bacteriol. 19, 193-203.
2. 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.
3. 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.
4. 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 Barkstrasse 10, 49163 Moenster, 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**  
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