

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 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
Enterococcus faecalis	29212	50-100	Good- luxuriant	>=50%	Red or maroon	35-37°C	18-24 Hours
Escherichia coli	25922	>=104	Inhibited	0%	-	35-37°C	18-24 Hours
Enterococcus faecium	19434	50-100	Good- luxuriant	>=50%	Colourless	35-37°C	18-24 Hours
Lactococcus lactis	19435	>=104	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.

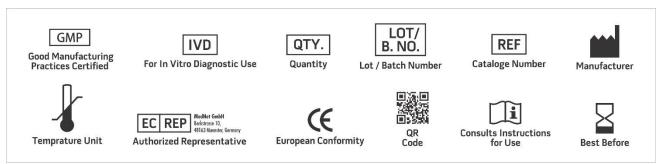
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

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.



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















*For Lab Use Only Revision: 08 Nov., 2019









