TM 810 – PFIZER SELECTIVE ENTEROCOCCUS AGAR

INTENDED USE

For selective isolation and cultivation of Enterococci.

PRODUCT SUMMARY AND EXPLANATION

Enterococci may be considered an essential part of the autochthonous microflora of humans and animals. Because of its wide distribution, Enterococci can also occur in different food commodities, especially those of animal origin. A wide variety of selective media for *Enterococcus* has been recommended and used. Pfizer Selective Enterococcus Agar is used for the selective isolation and cultivation of Enterococci. This medium is formulated as per Isenberg, Goldberg and Sampson by reducing the concentration of bile salts and sodium azide from the original formulation. The importance of esculin hydrolysis in differentiating Enterococci and streptococci was first reported by Rochaix as streptococci do not exhibit esculin hydrolysis.

COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	17.000
Peptic digest of animal tissue	3.000
Yeast extract	5.000
Bile salts	10.000
Sodium chloride	5.000
Sodium citrate	1.000
Esculin	1.000
Ferric ammonium citrate	0.500
Sodium azide	0.250
Agar	15.000

PRINCIPLE

The medium consists of Casein enzymic hydrolysate, peptic digest of animal tissue and yeast extract which provide nutrients like nitrogenous compounds, carbon, sulphur, vitamin B complex and trace ingredients for the growth of Enterococci. Esculin, a glycoside, is hydrolyzed by Enterococci to esculetin and dextrose. Esculetin reacts with ferric ammonium citrate to form a dark brown to black coloured complex. Bile salts and sodium azide inhibit gram-positive (except Enterococci) and gram-negative bacteria respectively. Pfizer Selective Enterococcus Agar is better used as selective primary medium.

INSTRUCTION FOR USE

- Dissolve 57.75 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Dispense as desired and Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well before pouring into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Light yellow to pale green homogeneous free flowing powder.

Appearance of prepared medium : Light amber coloured clear to slightly opalescent gel with a bluish tinge forms in Petri plates.

pH (at 25°C) : 7.1 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Esculin hydrolysis	Incubation Temperature	Incubation Period
Enterobacter aerogenes	13048	>=10^3	Inhibited	0%	-	35-37°C	18-24 Hours
Escherichia coli	25922	>=10^3	Inhibited	0%	-	35-37°C	18-24 Hours
Staphylococcus aureus	25923	50-100	Fair-good	20-40%	Negative reaction	35-37°C	18-24 Hours
Streptococcus pyogenes	19615	50-100	Good-luxuriant	>=50%	Negative reaction	35-37°C	18-24 Hours
Enterococcus faecalis	29212	50-100	Good-luxuriant	>=50%	Positive reaction, blackening around the colony	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

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5. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore.
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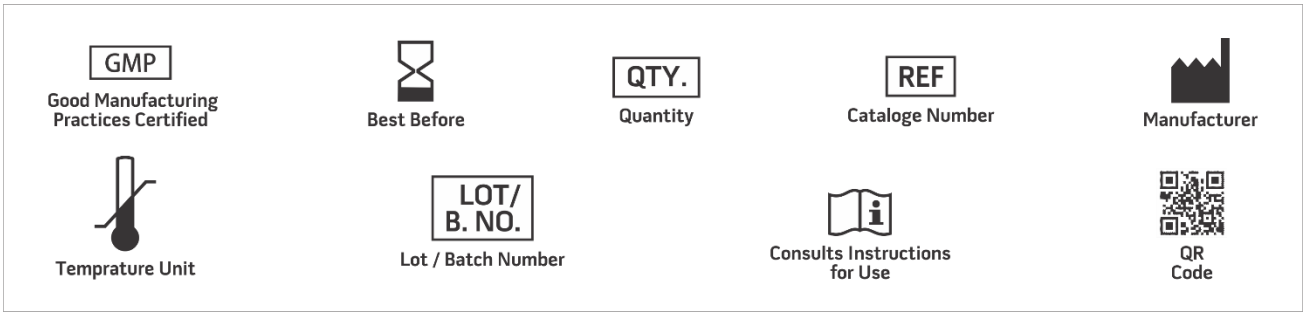

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

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