

Enterococcus Selective Agar (Enterococcosel Agar)

Cat. 1070

Selective medium for the enrichment and isolation of enterococci from diverse clinical materials and of highly contaminated products of sanitary importance.

Practical information

Applications	Categories
Selective isolation	Enterococci

Industry: Clinical

Principles and uses

Enterococcus Selective Agar (Enterococcosel Agar) is basically the same as Enterococcosel Broth (Cat. 1204) to which has been added 1,2% agar.

It is a sensitive enrichment medium for the isolation of streptococci from specimens containing numerous other flora. Many organisms such as saprophytic Neisseria, Staphylococcus, Haemophilus, non-hemolytic streptococci, and a certain number of Enterobacteriaceae are inhibited wholly or partially, permitting satisfactory fluorescence studies of Group A streptococci in 18 – 24 hours.

Casein and Soy peptones provide essential nutrients for growth. Dextrose is the fermentable carbohydrate energy source. Sodium chloride maintains the osmotic balance. Sodium citrate provides additional carbon. Sodium azide is an inhibitor. Sodium sulfite when reduced produces H₂S. L-Cystine lowers the oxidation-reduction potential by removing oxygen to maintain a low Eh. Crystal violet is a pH indicator. Bacteriological agar is the solidifying agent.

Formula in g/L

Bacteriological agar	12	Casein peptone	15
Crystal violet	0,0002	Dextrose	5
L-Cystine	0,2	Sodium azide	0,2
Sodium chloride	4	Sodium citrate	1
Sodium sulfite	0,2	Soy peptone	5

Preparation

Suspend 42,6 grams of medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Sterilize in autoclave at 118°C for 15 minutes. DO NOT OVERHEAT. Cool to 45-50°C, mix well and dispense into Petri dishes.

Instructions for use

- Inoculate and incubate at 35 ± 2°C for 18 – 24 hours.
- Adding 0.5% of sterile defibrinated sheep or rabbit blood notably increases its nutritional power and hemolytic studies can be conducted. These conditions yield good results in the isolation and identification of different groups of Streptococcus such as the alpha and beta-hemolytic, and the non-hemolytic.

Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rest	Fine powder	Beige	Amber slightly opalescent, with a violet hue	7,4 ± 0,2

Microbiological test

Incubation conditions: (35±2 °C / 18-24 h)

Microrganisms	Specification

Enterococcus faecalis ATCC 19433
Escherichia coli ATCC 25922
Enterococcus faecium ATCC 6057

Good growth
Inhibited growth
Good growth

Storage

Temp. Min.:2 °C
Temp. Max.:25 °C

Bibliography

Washington, D.C. 2nd Ed., 1974.
Facklam and Carly, 1985, Manual of Clinical Microbiology, Lennette and others (Eds). 4th Ed. ASM, Washington DC.

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