Technical Data Sheet

Chromocult® Enterococci Agar

Selective culture medium for the isolation, differentiation, and enumeration of Enterococci in water, foodstuffs, and other materials.

1009500500

Mode of Action

The presence of Enterococci, especially *E. faecalis*, *E. faecium*, *E. durans*, and *E. hirae*, serves as an indicator of fecal contamination.

The growth of Enterococci is stimulated by selected peptones, phosphates, and the addition of Tween® 80. Enterococci cleave the unique chromogenic substrates in the medium. This produces red colonies allowing an easy detection of Enterococci.

Sodium azide and ox-bile inhibit most accompanying microbial flora. Non-Enterococci produce colorless, blue/violet, or turquoise colonies. These colonies are easily distinguished from the red-colored colonies Enterococci produce.

Typical Composition (g/L)

Peptones	10.0
Sodium chloride	5.0
Sodium azide	0.2
Dipotassium hydrogenphosphate	3.4
Potassium di-hydrogenphosphate	1.6
Ox bile	0.5
Tween® 80	1.0
Chromogenic-mixture	0.25
Agar-agar	11.0

Preparation

Suspend 33.0 g in 1 liter of demineralized water by heating in a boiling water bath or a flowing steam. Stir the contents to assist dissolution (approx. 45 minutes). Let the medium cool to 45 - 50 °C and pour into plates.

Do not autoclave! Do not overheat!

pH. 7.0 ± 0.2 at 25 °C

The plates are clear and slightly yellow. If stored at 4 ± 2 °C and protected from light the plates are stable for 2 weeks.

Experimental Procedure

Inoculate the medium by the pour-plate method or by spreading the sample material on the surface of the plates. In addition, the membrane-filter technique can also be used.

The type of membrane filter affects the performance of the medium (growth and coloration of colonies). Best results were obtained using membrane filters of cellulose-mixed-ester material, for example, Gelman GN-6 (OSSMER, 1999).

Incubation: 24 ± 4 hours at 35-37 °C.

If this will neither result in a color change nor a visible growth, continue the incubation up to 44 ± 4 hours.

Evaluation

Enterococci:

Red colonies with a diameter of 0.5 to 2.0 mm

Non-Enterococci:

Colourless (e.g., *Aerococcus viridans* ATCC 29503)

Blue/violet (e.g., *Aerococcus viridans* ATCC 10400)

Turquoise (e.g., *Streptococcus equi* ATCC 33398)

Quality control

Test strains	Inoculum (cfu/mL)	Growth	Colony color
Enterococcus faecalis ATCC 19433	30 – 300	Good	Red
Enterococcus faecium ATCC 882	30 – 300	Good	Red
Vibrio cholerae eltor Ogawa CH 60	30 – 300	Good	Red
Vibrio parahaemolyticus ATCC 17802	30 – 300	Good	Red
Aerococcus viridans ATCC 10400	1000-2000	Fair/None	Blue/Violet
Bacillus cereus ATCC 11778	1000-2000	-	-
Escherichia coli ATCC 11775	1000-2000	-	-
Pseudomonas aeruginosa ATCC 27853	1000-2000	-	-

Aerococcus viridans

ATCC 10400

Aerococcus faecalis

ATCC 19433

Literature

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MANAFI, M. and Windhager, K. 1997, Rapid identification of enterococci in water with a new chromogenic assay. – Abstr. P-107, pp. 453, Abstracts of the 97th Meeting of the American Society for Microbiology, Miami, USA

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Ordering Information

Product	Ordering No.	Pack size
Chromocult® Enterococci Agar	1009500500	500 g

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