Technical Data Sheet

ReadyPlate™55 SLANETZ and BARTLEY acc. ISO 7899
Ordering number: 1.46765.0020

For the enumeration of enterococci in water and other liquids by the membrane filtration technique.

General

This culture medium complies with the specifications given by EN ISO 7899-2 and APHA (mEnterococcus agar) and released according to ISO 11133:2014. SLANETZ and BARTLEY agar is also called mEnteroccous agar.

Mode of Action

The growth of the entire accompanying Gram-negative microbial flora is inhibited by sodium azide. Enterococci reduce 2,3,5-Triphenyl tetrazoliumchloride (TTC) to give a red formazan inside the bacterial cell, their colonies are thus red in color. Nitrogen, minerals and amino acids are provided by the tryptose whilst yeast extract supplies vitamins. Glucose acts as the carbon source, dipotassium phosphates buffers the medium and agar-agar is the solidifying agent.

Typical Composition

Specified by ISO 7899-2 and APHA		ReadyPlate™55 Slanetz and Bartley	
Tryptose	20 g/l	Tryptose	20 g/l
Yeast Extract	5 g/l	Yeast Extract	5 g/l
Glucose	2 g/l	D(+)-Glucose	2 g/l
K_2HPO_4	4 g/l	K_2HPO_4	4 g/l
NaN_3	0.4 g/l	NaN_3	0.4 g/l
2,3,5-Triphenyl Tetrazoliumchloride	0.1 g/l	2,3,5-Triphenyl Tetrazoliumchloride	0.1 g/l
Agar	8-18 g/l	Agar-Agar*	10 g/l
Water	1000 ml/l	Water	n/a
pH at 25 °C	7.2 ± 0.1	pH at 25 °C	7.2 ± 0.2

* Agar-Agar is equivalent to other different terms of agar.

Application and Interpretation

Depend on the purpose for which the medium is used.

Each plate is provided with a label including a data matrix code for paperless plate identification. The code consists of a two-dimensional 20-digit serial number, which harbors the following information:

digits 1-3: here code 228 (corresponds to article 146709); digits 4-9: lot number; digits 10-14: batch specific individual number; digits 15-20: expiration date (YY/MM/DD).

Please check each agar plate before using it on sterility and pay attention to aseptic handling in order to avoid false positive results.

Membrane filtration of water samples: Place the inoculated membrane filters on the surface of the plates. Incubate the inoculated plates under aerobic conditions. e.g. acc. to EN ISO 7899-2 at 34-38 °C for 40-48 h.

Typical colonies show a red, maroon or pink color, either in the center or throughout the colony. Confirm the colonies according to the appropriate method.

Storage and Shelf Life

The product can be used for sampling until the expiry date if stored upright, protected from light and properly sealed at +15 °C to +25 °C.

Condensation can be prevented by avoiding quick temperature shifts and mechanical stress.

The testing procedures as described on the CoA can be started up to the expiry date printed on the label.

Disposal

Please mind the respective regulations for the disposal of used culture medium (e.g. autoclave for 20 min at 121 °C, disinfect, incinerate etc.).

Quality Control

Function	Control strains	Incubation	Reference medium	Method of control	Expected results
Productivity	*Enterococcus faecalis* ATCC® 19433 WDCM 0009	44 ±4 h at 36 ± 2°C	Tryptic Soy Agar (TSA)	Quantitative with membrane filtration	Recovery ≥ 50 %, red-maroon-pink colonies
	Enterococcus faecalis ATCC® 29212 WDCM 00087				
	Enterococcus faecalis CIP 106877 WDCM 00176				
	Enterococcus faecium ATCC® 6057 WDCM 00176				
	Enterococcus faecium CIP 106876 WDCM 00178				

Selectivity	*Escherichia coli* ATCC® 8739 WDCM 00012 *Staphylococcus aureus* ATCC® 6538 WDCM 00032	44 ±4 h at 36 ± 2°C	Tryptic Soy Agar (TSA)	Qualitative	Total inhibition

Please refer to the actual batch related Certificate of Analysis. The performance test is in accordance with the current version of EN ISO 11133 A recovery rate of 50 % is equivalent to a productivity value of 0.5.

Enterococcus faecalis ATCC® 11700

Literature

APHA (2012): Standard Methods for the Examination of Water. 22nd ed. American Public Health Association, American Water Works Association, Water Environment Federation, Washington, D.C.

ISO International Standardisation Organisation. Water quality - Detection and enumeration of intestinal enterococci - Part 2: Membrane filtration method. EN ISO 7899-1:2000.

ISO International Standardisation Organisation. Microbiology of food, animal feed and water – Preparation, production, storage and performance testing of culture media. EN ISO 11133:2014.

Lachica R.V. and Hartman, P.A. (1968): Two improved media for isolating and enumerating enterococci in certain frozen foods. J. Appl. Bact. **31**: 151-156.

Slanetz, L.W. and Bartley, C.H. (1957). Numbers of enterococci in water, sewage, and feces determined by the membrane filter technique with an improved medium. J. Bact. **74**: 591-595.

Ordering Information

Product	Cat. No.	Pack size
ReadyPlate™ 55 Slanetz and Bartley ISO 7899	1.46765.0020	20 x 55 mm
ReadyPlate™ 55 KIT Slanetz and Bartley ISO 7899	1.46766.0150	Kit
GranuCult™ SLANETZ and BARTLEY including TTC acc. ISO 7899	1.05262.0500	500 g
GranuCult™ SLANETZ and BARTLEY Agar (Base) acc. ISO 7899	1.05289.0500	500 g
2,3,5-Triphenyltetrazolium Chloride	1.08380.0010	10 ml
EZ-Pak® Membrane Dispenser Curve	EZCURVE01	1 unit
EZ-Pak™ cellulose mixed ester filter (gridded, 0,45 µm pore size)	EZHAWG474	4 x 150 pcs
S-Pak™ cellulose mixed ester filter (gridded, 0,45 µm pore size)	HAWG047S6	4 boxes of 600 membrane filters, individually packed
Bile Esculin Azide Agar, acc. to ISO 7899-2 for microbiology	1.00072.0500	500 g
Bile Esculin Azide Agar	1.46321.0020	20 x 90 mm
Chromocult® Enterococci-Agar for microbiology	1.00950.0500	500 g

Merck KGaA, 64271 Darmstadt,
Germany Fax: +49 (0) 61 51 / 72-60 80
mibio@merckgroup.com
www.merckmillipore.com/biomonitoring

Find contact information for your country at:
www.merckmillipore.com/offices
For Technical Service, please visit:
www.merckmillipore.com/techservice