

Technical Data Sheet

Chromocult®

Listeria Agar Selective-Supplement

Ordering number: 1.00432.0010

Listeria Agar Selective-Supplement contains a mixture of four antibiotics in a lyophilized form.

Mode of Action

It largely inhibits the growth of accompanying bacteria by a selective enrichment of *Listeria spp.* Amphotericin B largely reduces the growth of yeasts and moulds. Polymyxin B inhibits the growth of gram-negative bacteria. Nalidixic acid sodium salt inhibits mainly the growth of gram-negative bacteria, but also of some gram-positive bacteria. Ceftazidime has a broad spectrum activity against gram-negative and gram-positive bacteria.

Typical Composition

	Gram per vial	Final concentration [g/l]
Amphotericin B	0.005	0.010
Ceftazidime	0.010	0.020
Nalidixic acid sodium salt	0.010	0.020
Polymyxin B sulfate	38350 IU	76700 IU

Preparation

Dissolve the lyophilisate in the original vial by adding of 4 ml of a 50:50 mixture of sterile demineralized water and ethanol (96 %). Mix gently until a homogeneous yellow suspension is obtained.

Once rehydrated, the supplement should be added to the medium immediately (within 10 minutes). Add the entire vial content (4 ml) aseptically to 476 ml of molten Chromocult® Listeria Selective Agar (Base) cooled to 45-50 °C.

Subsequently add the content of one vial of Chromocult® Listeria Enrichment Supplement (article number 1.00439.0010) that has been pre-heated to 47-50 °C.

Stir gently during this addition to homogeneously distribution of both supplements.

The antibiotic solution is sensitive to heat. Directly after adding the antibiotic and enrichment solutions pour plates up to a volume of 15-20 ml in dishes with a diameter of 90 mm.

Any unused, rehydrated supplement should be discarded.

Storage

Usable up to the expiry date when stored dry and tightly closed at +2 °C to +8 °C.

Quality Control

Chromocult® Listeria Agar Selective-Supplement is tested in Chromocult® Listeria Agar (Base) acc. OTTAVIANI and AGOSTI acc. ISO 11290 (1.00427) in accordance with the current version of EN ISO 11133.

Function	Control strains	Incubation	Reference medium	Method of control	Expected results
Productivity	<i>Listeria monocytogenes</i> 4b ATCC® 13932	40-48 h at 36-38 °C	Tryptic Soy Agar (TSA)	Quantitative	Recovery ≥ 50 %, blue green colonies with opaque halo
	<i>Listeria monocytogenes</i> 1/2a ATCC® 35152				
Selectivity	<i>Escherichia coli</i> ATCC® 8739	40-48 h at 36-38 °C	-	Qualitative	Total inhibition
	<i>Escherichia coli</i> ATCC® 25922				
	<i>Enterococcus faecalis</i> ATCC® 19433				
	<i>Enterococcus faecalis</i> ATCC® 29212				
Specificity	<i>Listeria innocua</i> ATCC® 33090	40-48 h at 36-38 °C	-	Qualitative	No recovery limit specified, blue green colonies without opaque halo

Please refer to the actual batch related Certificate of Analysis.

A recovery rate of 50 % is equivalent to a productivity value of 0.5.



Listeria monocytogenes
ATCC® 13932



Listeria innocua
ATCC® 33090

Literature

APHA (2015): Compendium of Methods for the Microbiological Examination of Foods. 5th ed. American Public Health Association, Washington, D.C.

FDA-BAM (2013): Chapter No. 10: Detection and Enumeration of *Listeria monocytogenes* in Foods. U.S. Food and Drug Administration - Bacteriological Analytical Manual.

ISO International Standardisation Organisation. Microbiology of food and animal feeding stuffs -- Horizontal method for the detection and enumeration of *Listeria monocytogenes* - Part 1: Detection method -- Amendment 1: Modification of the isolation media and the haemolysis test, and inclusion of precision data. EN ISO 11290-1:1998 + Amd 1:2004.

ISO International Standardisation Organisation. Microbiology of food and animal feeding stuffs -- Horizontal method for the detection and enumeration of *Listeria monocytogenes* - Part 2: Enumeration method - Amendment 1: Modification of the enumeration medium. EN ISO 11290-2:1998 + Amd 1:2004.

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

Ordering Information

Product	Cat. No.	Pack size
Chromocult® <i>Listeria</i> Agar Selective-Supplement	1.00432.0010	10 vials
Chromocult® <i>Listeria</i> agar (base), acc. OTTAVIANI and AGOSTI acc. ISO 11290	1.00427.0500	500 g
Chromocult® <i>Listeria</i> Agar Enrichment- Supplement	1.00439.0010	10 vials

Merck KGaA
Frankfurter Strasse 250 64293
Darmstadt, Germany Fax: +49
(0) 61 51 / 72-60 80

Find contact information for your
country at:
www.merckmillipore.com/offices

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