



Chromocult® Listeria Agar Enrichment Supplement

Additive for the preparation of Chromocult® Listeria Selective Agar (ISO 11290)

Mode of Action

Chromocult Listeria Agar Enrichment Supplement is a homogeneous, sterile suspension of L- α -phosphatidylinositol in distilled water. Each vial is sufficient for 500 ml of medium.

L- α -phosphatidylinositol is added to Chromocult Listeria Selective Agar to differentiate **L. monocytogenes** from other listeriae. **L. monocytogenes** has the enzyme phosphatidylinositol phospholipase C (PI-PLC) described as a virulence factor. This phospholipase activity results in the formation of opaque haloes around **L. monocytogenes** colonies.

Apart from **L. monocytogenes**, only **L. ivanovii** among the listeriae shows phospholipase C activity.

Composition (per vial)

L- α -phosphatidylinositol 1 g

Final Concentration (per litre)

L- α -phosphatidylinositol 2 g

This concentration is in accordance with ISO 11290.

Preparation

A bottle of the sterile Enrichment Supplement is heated in a water bath to 48 - 50°C. Just after addition of Chromocult Listeria Selective Supplement (4 ml) add entire vial contents of Chromocult Listeria Enrichment Supplement (20 ml) aseptically to 480 ml of molten Chromocult Listeria Selective Agar Base cooled to 50-48°C. Stir gently during this addition to ensure even distribution.

Storage

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

Literature

Notermans, S.H.W., Dufrenne, J., Leimeister-Wächter, M., Domann, E., and Chakraborty, T. 1991. Phosphatidylinositol-specific phospholipase C activity as a marker to distinguish between pathogenic and nonpathogenic **Listeria** species. *Appl. Environ. Microbiol.* **57**:2666 - 2670.

Ottaviani, E.; Ottaviani, M., and Agosti, M. 1997. Differential agar medium for **Listeria monocytogenes**. *Industrie Alimentari* **36**, 888.

Vlaemynck, G., Lafarge, V., and Scotter, S. 2000. Improvement of the detection of *Listeria* by the application of ALOA, a diagnostic, chromogenic isolation medium. *J. Appl. Microbiol.* **88**, 430 - 441.

Bauwens, L., Vercammen, F., and Hertsens, A. 2003. Detection of pathogenic **Listeria** spp. in zoo animal faeces: use of immunomagnetic separation and a chromogenic isolation medium. *Vet. Microbiol.* **91**, 115 - 123.



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. **ISO 11290:2004**.

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. **ISO 11290:2004**.

FDA/BAM - Detection and Enumeration of **Listeria monocytogenes** Chapter 10 (January 2003)

Ordering Information

Product	Ordering No.	Pack size
Chromocult® Listeria Agar Enrichment Supplement	1.00439 .0010	10 vials
Chromocult® Listeria Selective Agar, Base, acc. Ottaviani und Agosti	1.00427.0500	500 g
Chromocult® Listeria Agar Selective Supplement	1.00432.0010	10 vials
Peptone water, buffered	1.07228.0500	500 g
Fraser Listeria Selective Enrichment Broth (base),	1.10398.0500	500 g
Fraser Listeria Selective Supplement (2 x 8 phials, for preparation of FRASER broth)	1.10399.0001	1 g
Singlepath® L`mono	1.04148.0001	1 g