



Reference: 06-133LYO1

Scharlau Microbiology - Technical Data

Product: **Campylobacter CCDA Selective Suppl. (ISO)**

Specification

Sterile selective supplement for the *Campylobacter spp.* especially in food samples.

Presentation

	Packaging Details	Shelf Life	Storage
10 Freeze dried vials			
Vial	23x60 mm glass vials, tag labelled, White plastic cap -	49 months	2-25 °C
with: 3 ± 0.1 g	10 vials per box.		

Composition

Compositon (g/vial)

Note: Each vial is sufficient to supplemented 500 ml of Blood Free Campylobacter Agar Base.

Cefoperazone.....	0.016
Amphotericin B.....	0.005

Reconstitute the original freeze-dried vial

by adding:

Sterile Distilled Water.....6 ml

Description /Technique

Description:

The formulation of Campylobacter Blood-Free Selective agar is a modification of the original Bolton's one first of all in the absence of blood, replaced by charcoal, ferrous sulphate and sodium pyruvate; then in the change of Cephazolin with Cefoperazone and the addition of Amphotericin which improve the selectivity of this medium.

Technique:

Collect, dilute and prepare samples and volumes as required according to specifications, directives, official standard regulations and/or expected results.

Reconstitute the vial with a of sterile diluent, pre-warmed to aprox. 37°C and add it to 500 ml of any melted Agar base para CCDA cooled to 50°C temperature before pouring into Petri dishes.

Once solidified on a flat surface, spread the plates by streaking methodology or by spiral method.

Incubate the plates in microaerophilic atmosphere at 40-42°C for 24-48h.

(Incubation times longer than those mentioned above or different incubation temperatures may be required depending on the sample or the specifications).

After incubation, count all the colonies that have appeared onto the surface of the agar.

Presumptive isolation of *Campylobacter spp.* must be confirmed by further microbiological and biochemical tests.



Reference: 06-133LYO1

Scharlau Microbiology - Technical Data

Product: **Campylobacter CCDA Selective Suppl. (ISO)**

Quality control

Physical/Chemical control

Color : Yellowish-brown

Microbiological control

Reconstitute 1 vial as indicated in COMPOSITION; shake and dissolve completely

Add 1 vial to 500 ml of medium base. DO NOT HEAT once supplemented.

Microaerophilia. Incubation at $35 \pm 2^\circ\text{C}$ or $42 \pm 2^\circ\text{C}$ during 24-48 horas

Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020.

Distribute the complete medium, cooled to 50°C , into 90 mm plates

Incubate according instructions for complete medium indicated in COMPOSITION.

Microaerophilia. Incubation at $41,5 \pm 1^\circ\text{C}$; reading at 44 ± 4 h

Microorganism

Campylobacter jejuni ATCC® 29428, WDCM 00156

Camp. coli-jejuni ATCC® 33291, WDCM 00005

Escherichia coli ATCC® 8739, WDCM 00012

Stph. aureus ATCC® 25923, WDCM 00034

Growth

Good ($\geq 50\%$)

Good ($\geq 50\%$)

Partial Inhibition

Inhibited

Sterility control

Add 5 ml of the sample to:

100 ml TSB and 100 ml Thioqlycollate.

Incubation 48 h at $30-35^\circ\text{C}$ and 48 h at $20-25^\circ\text{C}$: NO GROWTH.

Bibliography

- ASPINALL, S.T., D.R.A. WAREING, P.G. HAYWARD & D.N. HUTCHINSON (1993) Selective medium for thermophilic campylobacters including *Campylobacter upsaliensis*. *J. Clin. Pathol.* 46:829-831.
- BAYLIS, C.L., (editor) (2007) *Manual of Microbiological Methods for the Food and Drinks Industry*, 5th Edition Method 3.3.1:2007. CCFRA .Chipping Campden. U.K.
- BOLTON, F.J. (2000) Methods for isolation of campylobacters from humans, animals, food and water. In "The increasing incidence of human campylobacteriosis" Report and Proceedings of a WHO Consultation of Experts. Copenhagen Denmark 21-25 November 2000, WHO/CDS/ CSRAPH 2001. p. 87-93.
- BOLTON, F.J., D. COATES, (1983) Development of a blood-free campylobacter medium: screening tests on basal media and supplements, and the ability of selected supplements to facilitate aerotolerance. *J. Appl. Bacteriol.* 54:115-125.
- BOLTON, F.J., D. COATES & D.N. HUTCHINSON (1984) The ability of *Campylobacter* media supplements to neutralize photochemically induced toxicity and hydrogen peroxide. *J. Appl. Bacteriol.* 56:151-157.
- CORRY, J.E.L., H. IBRAHIM ATABAY, S.J. FORSYTHE & L.P. MANSFIELD (2003) Culture Media for the isolation of campylobacters, helicobacters and arcobacters. In *Handbook of Culture Media for Food Microbiologists*. J.E.L. Corry et al. (Eds.) Elsevier Science B.V. Amsterdam.
- CORRY, J.E.L., G.D.W. CURTIS & R.M. BAIRD (2003) *Handbook of culture media for food Microbiology*. Elsevier Sci. B. V. Amsterdam.
- FDA (Food and Drug Administrations) (1998) *Bacteriological Analytical Manual*. 8th Edition. Revision A. AOAC International. Gaithersburg, Maryland, USA.
- HUNT, J.M., C. ABEYTA & T. TRAN (1998) *Campylobacter*. In *FDA BAM 8th Edition (revision A) 7.01-7.027* AOAC International. Gaithersburg, Md, USA.
- HUTCHINSON, D.N. & F.J. BOLTON (1984) Improved blood-free selective medium for the isolation of *Campylobacter jejuni* from faecal specimens. *J. Clin Pathol.* 37:956-957.
- ISO 10272-1 Standard (2017) *Microbiology of the food chain - Horizontal Method for detection and enumeration of Campylobacter spp. - Part 1: Detection method*.
- ISO 10272-2 Standard (2017) *Microbiology of the food chain - Horizontal Method for detection and enumeration of Campylobacter spp. - Part 2: Colony count-technique*.
- ISO 11133:2014/ Adm 1:2018. *Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media*.
- STERN, N.J., J.E. LINE & H.C. CHEN (2001) *Campylobacter* In "Compendium of methods for the Microbiological Examination of Foods" 4th Ed. F.P. Downes & K. Ito (Eds.) APHA, Washington DC. USA.