Campylobacter Blood-Free Selective Agar Base (modified CCDA)

Medium for the isolation of Campylobacter from foods.

The use of Campylobacter Blood-Free Selective Agar is specified by the UK Ministry of Agriculture, Fisheries and Food (MAFF) in a validated method for isolation of Campylobacter from foods.

Mode of Action

Campylobacter Blood-Free Selective Agar supports the growth of most enteric Campylobacters. Addition of CCDA Selective Supplement inhibits growth of Enterobacteriaceae, Yeasts and Fungis, it makes it more selective for C.jejuni, C.coli and C.lari and an increased recovery rate has been achieved when incubated at 37 °C rather than at 42 °C.

Typical Composition (g/litre)

Peptone 20,0; Casein hydrolysate 3,0; activated charcoal 4,0; Sodium chloride 5,0; Sodium desoxycholate 1,0; Sodium pyruvate 0,25; Ferrous sulphate 0,25; Agar-Agar 12,0.

Preparation

Dissolve 22,75 g in 500 ml of demin. water and heat to boiling until completely dissolved.

Autoclave (15 min. at 121° C).

Cool to 45–50 °C. Aseptically add the content of 1 vial of CCDA Selective Supplement. Mix well and pour into sterile Petridishes. pH: 7.4 ± 0.2 at 25 °C.

The prepared medium is black.

The prepared plates can be stored for up to 2 weeks at 2-8 °C.

Experimental Procedure and Evaluation

Inoculate by spreading the sample material on the surface of the plates. Plates must be dried directly prior to inoculation in order

to prevent presence of condensing water on the surface and swarming of the bacteria.

Incubation: 24-48 hours in an O $_2$ -deficient, ${\rm CO}_2$ -enriched atmoshere which can be produced in an anaerobic jar with the aid of Anaerocult® C or in the special incubation bag with the aid of Anaerocult® C mini. Prevent drying out of the surface of the plates during incubation!

Literature

BOLTON, F.J., HUTCHINSON, D.N., a. COATES, D.: J. Clin. Microbiol.19, 169-171, (1984)

HUTCHINSON, D.N. a. BOLTON, F.J.: J. Clin. Path. 34, 956-957, (1984).

MAFF, : Validated Methods for the Analysis of Foodstuffs: Method for the detection of thermotolerant Campylobacter in Foods (v30); J. Assoc. Publ. Analysts 29, 253-262; (1993).

BOLTON, F.J., HUTCHINSON, D.N., a. PARKER, G.: Eur. J. Clin. Microbiol. Infect. Dis.7, 155-160, (1988).

Ordering Information

Product	Merck Cat. No.	Pack size
Campylobacter Blood-Free Selective Agar Base (modified CCDA)	1.00070.0500	500 g
Anaerobic jar	1.16387.0001	1 ea
Anaeroclip®	1.14226.0001	1 x 25
Anaerocult® C	1.16275.0001	1 x 10
Anaerocult® C mini	1.13682.0001	1 x 25
CCDA Selective Supplement	1.00071.0001	16 vials

Quality control

Test strains	Recovery rate after 48 hours	
Campylobacter jejuni ATCC 33291	≥ 70 %	
Campylobacter jejuni ATCC 29428	≥ 70 %	
Campylobacter coli ATCC 33559	≥ 70 %	
E. coli ATCC 25922	≥ 0.01 %	
Candida albicans ATCC 10231	≤ 20 %	