

Campylobacter Blood Free Selective Medium

(Modified CCDA-Improved)

BC2112

A blood free Campylobacter medium which can be made selective for the growth of *C. jejuni*, *C. coli* and *C. laridis* by the addition of the selective supplement S2112 when incubated at 37°C. The supplement S2112 consists of cefoperazone and amphotericin and has been shown to give superior performance to the selective cocktails of Skirrow, Butzler and Blazer-Wang.

A membrane filtration method, omitting the antibiotic supplement, can be used to isolate antibiotic sensitive strains.

Formula grams per litre

Peptone mixture	25.0
Bacteriological Charcoal	4.0
Sodium chloride	3.0
Sodium desoxycholate	1.0
Ferrous sulphate	0.25
Sodium pyruvate	0.25
Bacteriological Agar	12.0

pH: 7.4 +/- 0.2

Appearance: Black agar.

Preparation

Suspend 45.5 grams of powder in 1 litre of deionised water. Allow to soak for 10 minutes, swirl to mix, then sterilise by autoclaving at 121°C for 15 minutes. Cool to 47°C then add 2 vials of S2112 or 1 vial of S2212 supplement, mix well and pour into petri dishes, ensuring that the charcoal is kept in suspension.

Quality Control Organisms - Suggestions

<i>C. jejuni</i>	NCTC 11322	
<i>E. coli</i> (inhibition)	ATCC 11775	
<i>Candida albicans</i> (inhibition)	ATCC 10231	

Storage of Prepared Medium

Plates should be stored at 4-8°C in the dark. Plates should be used within 1 week.

Directions for use

Inoculate *C. jejuni*, *C. coli*, *C. laridis* by surface streaking to single colonies.

C. cinaedi, *C. fennelliae* use the membrane filtration method of Goosens *et al.*

Incubate 37°C for 48 hours in an atmosphere of 5% oxygen, 10% carbon dioxide and 85% nitrogen. *C. cinaedi* and *C. fennelliae* require up to 7 days.

Growth characteristics

Organism	Colony size (mm)	Shape & surface	Colour	Other
<i>C. jejuni</i>	2.0-3.0	F.E.G.	Grey/ White	Efflorescent (spreading moist)
<i>C. coli</i>	1.0-2.5	CV.E.G.	Creamy Grey	Moist
<i>C. laridis</i>	1.5-3.0	F.E.G.	Grey	(C.V. moist)
<i>C. cinaedi</i>	2.0-3.0	F.E.G.	Pale Grey	requires 7 days in absence of S2112
<i>C. fennelliae</i>	2.0-3.0	F.E.G.	Pale Grey	requires 7 days in absence of S2112
Other <i>Enterobacteriaceae</i> – No growth if sensitive to cefoperazone.				

References

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