

BT-SPEC-0523

Page 1 of 7

## **OXOID QUALITY ASSURANCE PRODUCT SPECIFICATION**

## **BOLTON BROTH SELECTIVE SUPPLEMENT (SR0183)**

#### BOLTON BROTH SELECTIVE SUPPLEMENT

SR0183

#### **Formula**

Per vial (each vial is sufficient to supplement 500ml of medium)

Cefoperazone	10.0 mg
Trimethoprim	10.0 mg
Vancomycin	10.0 mg
Cyclohexamide	25.0 mg

#### Description

A freeze-dried selective supplement for the isolation of Campylobacter species.

#### **Directions**

Aseptically add 5ml of ethanol to one vial and mix gently to dissolve. Aseptically add the contents to 500ml of sterile Bolton Broth (CM 983) cooled to 50°C. Add 25ml laked horse blood (SR48). Mix well and distribute into sterile containers.

#### **Physical Characteristics**

White pellet Sterility - passes test

BT-SPEC-0523

Page 2 of 7

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#### **Microbiological Tests Using Optimum Inoculum Dilution**

Tested with the addition of Bolton Broth (CM983) and 5% Laked Horse Blood (SR48)

Reactions after aerobic incubation at  $42 \pm 2^{\circ}$ C for  $48 \pm 4$  hours.

Subculture broths onto Blood-Free Campylobacter Agar CM739 + SR155 and incubate for further  $42 \pm 2^{\circ}$ C for  $48 \pm 4$  hours under microaerophilic conditions (for details refer to Oxoid Manual - Atmosphere Generation Systems)

Campylobacter coli	ATCC® 33559	0.5-3 mm grey colonies
Campylobacter lari	ATCC® 35221	0.5-3 mm grey colonies
Enterococcus faecalis	ATCC® 29212	No growth
Pseudomonas aeruginosa	ATCC® 25668	No growth
Pseudomonas aeruginosa	ATCC® 27853	No growth
Proteus mirabilis	NCTC 10975	No growth
Staphylococcus aureus	ATCC® 25923	No growth
Candida albicans	ATCC® 10231	No growth
Aspergillus flavus	ATCC® 22547	No growth

BT-SPEC-0523

Page 3 of 7

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Testing performed in accordance with ISO11133:2014

Reactions after microaerophilic incubation at 37  $\pm$  2°C for 5 hours followed by 41.5  $\pm$  2°C for 44  $\pm$  4 hours. Subculture broths onto Blood-Free Campylobacter Agar CM739  $\pm$  SR155 and incubate for further 41.5  $\pm$  2°C for 48  $\pm$  4 hours hours under microaerophilic conditions (for details refer to Oxoid Manual - Atmosphere Generation Systems)

#### **FOOD MICROBIOLOGY TABLE E**

#### **Mixed Cultures**

Inoculate 20ml quantities of medium to achieve 10 to 100 colony-forming units/20ml (cfu/20ml) of *Campylobacter spp.* and 1E+04 to 1E+05 cfu of *Escherichia coli* and *Proteus mirabilis*. Incubate broths at 37  $\pm$  2°C for 5 hours followed by 41.5  $\pm$  2°C for 44  $\pm$  4 hours. After incubation, subculture onto Blood-Free Campylobacter Agar (CM739 + SR155) and incubate plates under microaerophilic conditions at 41.5  $\pm$  2°C for 48 hours.

Campylobacter jejuni + Escherichia coli	ATCC® 29428 ATCC® 8739	WDCM00156 WDCM00012	0.5-3.0mm grey colonies No growth
+ Proteus mirabilis	ATCC® 29906	WDCM00023	No growth
Campylobacter jejuni	ATCC® 29428	WDCM00156	0.5-3.0mm grey colonies
+ Escherichia coli	ATCC® 25922	WDCM00013	No growth
+ Proteus mirabilis	ATCC® 29906	WDCM00023	No growth
Campylobacter jejuni	ATCC® 33291	WDCM00005	0.5-3.0mm grey colonies
+ Escherichia coli	ATCC® 8739	WDCM00012	No growth
+ Proteus mirabilis	ATCC® 29906	WDCM00023	No growth
Campylobacter jejuni	ATCC® 33291	WDCM00005	0.5-3.0mm grey colonies
+ Escherichia coli	ATCC® 25922	WDCM00013	No growth
+ Proteus mirabilis	ATCC® 29906	WDCM00023	No growth
Campylobacter coli	ATCC® 33291	WDCM00004	0.5-3.0mm grey colonies
+ Escherichia coli	ATCC® 8739	WDCM00012	No growth
+ Proteus mirabilis	ATCC® 29906	WDCM00023	No growth
Campylobacter coli	ATCC® 33291	WDCM00004	0.5-3.0mm grey colonies
+ Escherichia coli	ATCC® 25922	WDCM00013	No growth
+ Proteus mirabilis	ATCC® 29906	WDCM00023	No growth

A satisfactory result is represented by recovery of >100 cfu of *Campylobacter spp.* on Blood-Free Campylobacter Agar (CM739 + SR155).



BT-SPEC-0523

Page 4 of 7

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## **BOLTON BROTH SELECTIVE SUPPLEMENT (SR0183)**

#### **Pure Cultures**

Inoculate 20ml quantities of medium to achieve 1E+04 to 1E+05 colony-forming units/20ml (cfu/20ml) of *Escherichia coli* and *Proteus mirabilis*. Incubate broths at 37  $\pm$  2°C for 5 hours followed by 41.5  $\pm$  2°C for 44  $\pm$  4 hours. After incubation, subculture onto Blood-Free Campylobacter Agar (CM739 + SR155) and incubate plates under microaerophilic conditions at 41.5  $\pm$  2°C for 48 hours.

Escherichia coli ATCC® 8739 WDCM00012 No growth Escherichia coli ATCC® 25922 WDCM00013 No growth Proteus mirabilis ATCC® 29906 WDCM00023 No growth

A satisfactory result is represented by no growth of *Escherichia coli* and *Proteus mirabilis* on Blood-Free Campylobacter Agar (CM739 + SR155).

Inoculate 20ml quantities of medium to achieve 1E+04 to 1E+05 colony-forming units/20ml (cfu/20ml) of *Escherichia coli* and *Proteus mirabilis*. Incubate broths at  $37 \pm 2^{\circ}$ C for 5 hours followed by 41.5  $\pm$  2°C for 44  $\pm$  4 hours. After incubation, subculture onto Tryptone Soya Agar (CM0131) and incubate plates under microaerophilic conditions at  $37 \pm 2^{\circ}$ C for 48 hours.

Escherichia coli ATCC® 8739 WDCM00012 1-3mm cream colonies Escherichia coli ATCC® 25922 WDCM00013 1-3mm cream colonies

Proteus mirabilis ATCC® 29906 WDCM00023 1-2mm straw, swarming colonies

A satisfactory result is represented by <100 cfu of *Escherichia coli* and <10 cfu of *Proteus mirabilis* on Tryptone Soya Agar (CM131).

BT-SPEC-0523

Page 5 of 7

## OXOID QUALITY ASSURANCE PRODUCT SPECIFICATION

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#### WATER MICROBIOLOGY TABLE F

#### **Mixed Cultures**

Inoculate 20ml quantities of medium to achieve 10 to 100 colony-forming units/20ml (cfu/20ml) of *Campylobacter spp.* and 1E+04 to 1E+05 cfu of *Escherichia coli* and *Proteus mirabilis.* Incubate broths at 37  $\pm$  2°C for 44  $\pm$  4 hours. After incubation, subculture onto Blood-Free Campylobacter Agar (CM739 + SR155) and incubate plates under microaerophilic conditions at 41.5  $\pm$  2°C for 48 hours.

Campylobacter jejuni	ATCC® 29428	WDCM00156	0.5-3.0mm grey colonies
+ Escherichia coli	ATCC® 8739	WDCM00012	No growth
+ Proteus mirabilis	ATCC® 29906	WDCM00023	No growth
Campylobacter jejuni	ATCC® 25922	WDCM00156	0.5-3.0mm grey colonies
+ Escherichia coli		WDCM00013	No growth
+ Proteus mirabilis		WDCM00023	No growth
Campylobacter jejuni	ATCC® 33291	WDCM00005	0.5-3.0mm grey colonies
+ Escherichia coli	ATCC® 8739	WDCM00012	No growth
+ Proteus mirabilis	ATCC® 29906	WDCM00023	No growth
Campylobacter jejuni	ATCC® 25922	WDCM00005	0.5-3.0mm grey colonies
+ Escherichia coli		WDCM00013	No growth
+ Proteus mirabilis		WDCM00023	No growth
Campylobacter coli	ATCC® 33291	WDCM00004	0.5-3.0mm grey colonies
+ Escherichia coli	ATCC® 8739	WDCM00012	No growth
+ Proteus mirabilis	ATCC® 29906	WDCM00023	No growth
Campylobacter coli	ATCC® 25922	WDCM00004	0.5-3.0mm grey colonies
+ Escherichia coli		WDCM00013	No growth
+ Proteus mirabilis		WDCM00023	No growth

A satisfactory result is represented by recovery of >100 cfu of *Campylobacter spp.* on Blood-Free Campylobacter Agar (CM739 + SR155).



BT-SPEC-0523

Page 6 of 7

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## **BOLTON BROTH SELECTIVE SUPPLEMENT (SR0183)**

#### **Pure Cultures**

Inoculate 20ml quantities of medium to achieve 1E+04 to 1E+05 colony-forming units/20ml (cfu/20ml) of *Escherichia coli* and *Proteus mirabilis*. Incubate broths at  $37 \pm 2^{\circ}$ C for  $44 \pm 4$  hours. After incubation, subculture onto Blood-Free Campylobacter Agar (CM739 + SR155) and incubate plates under microaerophilic conditions at  $41.5 \pm 2^{\circ}$ C for 48 hours.

Escherichia coli ATCC® 8739 WDCM00012 No growth Escherichia coli ATCC® 25922 WDCM00013 No growth Proteus mirabilis ATCC® 29906 WDCM00023 No growth

A satisfactory result is represented by no growth of *Escherichia coli* and *Proteus mirabilis* on Blood-Free Campylobacter Agar (CM739 + SR155).

Inoculate 20ml quantities of medium to achieve 1E+04 to 1E+05 colony-forming units/20ml (cfu/20ml) of *Escherichia coli* and *Proteus mirabilis*. Incubate broths at  $37 \pm 2^{\circ}$ C for  $44 \pm 4$  hours. After incubation, subculture onto Tryptone Soya Agar (CM0131) and incubate plates under microaerophilic conditions at  $37 \pm 2^{\circ}$ C for 48 hours.

Escherichia coli ATCC® 8739 WDCM00012 1-3mm cream colonies Escherichia coli ATCC® 25922 WDCM00013 1-3mm cream colonies

Proteus mirabilis ATCC® 29906 WDCM00023 1-2mm straw, swarming colonies

A satisfactory result is represented by <100 cfu of *Escherichia coli* and <10 cfu of *Proteus mirabilis* on Tryptone Soya Agar (CM131).



BT-SPEC-0523

Page 7 of 7

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# **Revision History**

Section / Step	Description of Change	Reason for Change	Reference
Creation of ISO11133 section	Update to include testing of ISO11133:2014	Change control	BT-CC-1208