OXOID QUALITY ASSURANCE PRODUCT SPECIFICATION

FRASER SELECTIVE SUPPLEMENT SR0156E

FRASER SELECTIVE SUPPLEMENT **SR0156E**

Formula

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

Ammonium iron (III) citrate	250.0 mg
Nalidixic acid	10.0 mg
Acriflavine hydrochloride	12.5 mg

Description

A selective supplement for the detection of *Listeria monocytogenes*.

Directions

Aseptically add 5ml of 1:1 ethanol:sterile distilled water to 1 vial and mix gently to dissolve. Aseptically add the vial contents to 500ml of sterile Fraser Broth Base (CM0895) prepared as directed and cooled to 50°C. Mix well and aseptically dispense into sterile containers.

Physical Characteristics

Orange/green pellet
Appearance of reconstituted supplement - orange/brown particulate solution
Sterility - passes test

Microbiological Tests Using Optimum Inoculum Dilution

Control Media: Brilliance™ Listeria Agar (ISO) or Columbia Blood Agar Base enriched with 5% v/v horse blood, where appropriate.

Tested in Fraser Broth Base CM0895

Reactions after incubation at 37 ± 2°C for 24 ± 2 hours

Inoculate 10ml quantities of medium to achieve 1-10 colony-forming units/ml (cfu/ml) of *Listeria* spp. Incubate broths at 37 ± 2°C for 24 ± 2 hours. Subculture onto Brilliance™ Listeria Agar (ISO) (CM1212, SR0257 & SR0258) and incubate plates at 37 ± 2°C for 24 to 48 hours.

Listeria monocytogenes	ATCC®7644
Listeria monocytogenes	ATCC®13932

A satisfactory result is represented by recovery of positive strains equal to or greater than a 3 log(10) increase.

Positive strains shall produce aesculin hydrolysis after 48 hours.

Reactions after incubation at 37 ± 2°C for 48 ± 2 hours

Inoculate 10ml quantities of medium to achieve 1E+03 to 1E+04 cfu/ml. Incubate broths at 37°C for 48 hours.

Bacillus cereus	ATCC®10876	No aesculin hydrolysis (no blackening)

Negative strains shall produce no aesculin hydrolysis after 48 hours.

Testing performed in accordance with ISO11133:2014

Inoculation with mixed cultures

Inoculate 10ml quantities of medium to achieve 1-10 colony-forming units/ml (cfu/ml) of *Listeria* spp., to each add 1E+02 to 1E+03 cfu/ml of *Escherichia coli* and 1E+02 to 1E+03 cfu/ml of *Enterococcus faecalis.* Incubate broths at 37 ± 2°C for 24 ± 2 hours. Subculture onto Brilliance™ Listeria Agar (ISO) (CM1212, SR0257 & SR0258) and incubate plates at 37 ± 2°C for 24 ± 2 hours

Reactions after incubation at 37 ± 2°C for 24 ± 2 hours

Listeria monocytogenes	ATCC®13932	WDCM00021	0.5-1.0mm blue colonies with halo
+ *Escherichia coli*	ATCC®8739	WDCM00012	No growth
+ *Enterococcus faecalis*	ATCC®19433	WDCM00009	No growth
Listeria monocytogenes	ATCC®13932	WDCM00021	0.5-1.0mm blue colonies with halo
+ *Escherichia coli*	ATCC®25922	WDCM00013	No growth
+ *Enterococcus faecalis*	ATCC®19433	WDCM00009	No growth
Listeria monocytogenes	ATCC®13932	WDCM00021	0.5-1.0mm blue colonies with halo
+ *Escherichia coli*	ATCC®8739	WDCM00012	No growth
+ *Enterococcus faecalis*	ATCC®29212	WDCM00087	No growth

OXOID QUALITY ASSURANCE PRODUCT SPECIFICATION

FRASER SELECTIVE SUPPLEMENT SR0156E

Listeria monocytogenes	ATCC®13932	WDCM00021	0.5-1.0mm blue colonies with halo
+ *Escherichia coli*	ATCC®25922	WDCM00013	No growth
+ *Enterococcus faecalis*	ATCC®29212	WDCM00087	No growth
Listeria monocytogenes	ATCC®35152	WDCM00109	0.5-1.0mm blue colonies with halo
+ *Escherichia coli*	ATCC®8739	WDCM00012	No growth
+ *Enterococcus faecalis*	ATCC®19433	WDCM00009	No growth
Listeria monocytogenes	ATCC®35152	WDCM00109	0.5-1.0mm blue colonies with halo
+ *Escherichia coli*	ATCC®25922	WDCM00013	No growth
+ *Enterococcus faecalis*	ATCC®19433	WDCM00009	No growth
Listeria monocytogenes	ATCC®35152	WDCM00109	0.5-1.0mm blue colonies with halo
+ *Escherichia coli*	ATCC®8739	WDCM00012	No growth
+ *Enterococcus faecalis*	ATCC®29212	WDCM00087	No growth
Listeria monocytogenes	ATCC®35152	WDCM00109	0.5-1.0mm blue colonies with halo
+ *Escherichia coli*	ATCC®25922	WDCM00013	No growth
+ *Enterococcus faecalis*	ATCC®29212	WDCM00087	No growth

A satisfactory result is represented by recovery of >10 cfu of *Listeria monocytogenes* on Brilliance™ Listeria Agar (ISO).

Inoculation with pure cultures

Inoculate 10ml quantities of medium to achieve 1E+03 to 1E+04 colony-forming units/ml (cfu/ml) of *Escherichia coli* and *Enterococcus faecalis.* Incubate broths at 37 ± 2°C for 24 ± 2 hours. Subculture onto Brilliance™ Listeria Agar (ISO) (CM1212, SR0257 & SR0258) and Tryptone Soya Agar (CM0131) then incubate plates at 37 ± 2°C for 24 ± 2 hours.

Reactions after incubation at 37 ± 2°C for 24 ± 2 hours

Escherichia coli	ATCC®8739	WDCM00012	No growth (CM1212, SR0257 & SR0258)
Escherichia coli	ATCC®8739	WDCM00012	Cream colonies (CM0131)
Escherichia coli	ATCC®25922	WDCM00013	No growth (CM1212, SR0257 & SR0258)
Escherichia coli	ATCC®25922	WDCM00013	Cream colonies (CM0131)
Enterococcus faecalis	ATCC®19433	WDCM00009	No growth (CM1212, SR0257 & SR0258)
Enterococcus faecalis	ATCC®19433	WDCM00009	Cream colonies (CM0131)

Enterococcus faecalis	ATCC®29212	WDCM00087	No growth (CM1212, SR0257 & SR0258)
Enterococcus faecalis	ATCC®29212	WDCM00087	Cream colonies (CM0131)

A satisfactory result is represented by no growth of *Escherichia coli* and *Enterococcus faecalis* on Brilliance™ Listeria Agar (ISO) and <100 cfu on Tryptone Soya Agar.

OXOID QUALITY ASSURANCE PRODUCT SPECIFICATION

FRASER SELECTIVE SUPPLEMENT SR0156E

Revision History

Section / Step	Description of Change	Reason for Change	Reference
Physical Characteristics	Added appearance of supplement after reconstitution	Change control	MOC-2025-0365