

Product: CFC Selective Supplement

Specification

Sterile selective supplement for the isolation of Pseudomonas spp. according to ISO.

10 Freeze dried vials	Packaging Details		Shelf Life	Storage
	23x60 r	nm glass vials, tag labelled, white plastic cap -	49 months	2-25 °C
with: 9 ± 0.1 g	10 vials per box.			
Composition				
Compositon (g/vial)		Note: Each vial is sufficient to supplement 500) ml	
		of medium Base for <i>Pseudomonas spp.</i>		
Cetrimide	0.005			
Fucidin	0.005			
Cephalothin sodium salt	0.025			

Reconstitute the original freeze-dried vial by adding: Sterile distilled water.....9 ml

Description /Technique

Description:

CFC selective supplement is added to Pseudomonas Agar Base in order to obtain a complete medium suitable for the isolation of Pseudomonas spp.

Pseudomonas CFC Agar is a selective medium recommended by ISO for the enumeration of Pseudomonas spp in meat and meat products, including poultry.

Gelatin peptone and enzymatic digest of casein provide nitrogen, vitamins, minerals and amino acids essential for growth and permits the growth of a great number of *Pseudomonas spp*. The potassium sulfate and magnesium chloride help the formation of pigmentation (pyocyanin). The addition of cetrimide, fucidin and cephaloridine make the medium more selective for Pseudomonas spp. including Burkholderia cepacia.

Cetrimide, fucidin and cephalothin inhibit Gram positive bacteria and support the growth of Pseudomonas spp, (including P. aeruginosa), whilst inhibiting most other Gram negative bacteria.

Technique:

Reconstitute the vial with 9 ml sterile diluent in aseptic conditions and add it to 500 ml of Pseudomonas Agar Base (ISO) cooled to 50 °C. Pour into MF plates.

Do not overheat once supplemented.

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

Incubate the plates right side up aerobically at 21 ± 3 °C for 44 ± 1 h.

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

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

Each laboratory must evaluate the results according to their specifications.

Presumptive isolation of *Pseudomonas spp*. must be confirmed by further microbiological or biochemical tests.

Colonies which show a positive oxidase reaction are Pseudomonas spp.



Scharlau Microbiology - Technical Data

Product: CFC Selective Supplement

Quality control

Physical/Chemical control Color : White

Microbiological control

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

Microbiological control according to ISO 11133:2014/A1:2018.

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

Aaerobiosis. Incubation at 25 °C ± 1, reading at 44 ± 4h

Microorganism

Escherichia coli ATCC [®] 8739, WDCM 00012	
Ps. fluorescens ATCC [®] 13525, WDCM 00115	
Pseudomonas fragi ATCC [®] 4973, WDCM 00116	

Sterility control

Add 5 ml of the sample to: 100 ml TSB and 100 ml Thioglycollate. Incubation 48 h at 30-35 °C and 48 h at 20-25 °C: NO GROWTH.

Bibliography

· BROWN, V.L. & E.J.L. LOWBURY (1965) Use of an improved Cetrimide Agar Medium and of culture methods for P. aeruginosa. J., Clin. Pathol. 18:752.

. ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.

Growth Inhibited Good (≥50 %) Good (≥50 %)

· ISO 13720 Standard (2010) Meat and meat products. Enumeration of presumptive Pseudomonas spp.

· GOTO S. & S. ENOMOTO (1970) Nalidixic acid cetrimide agar. A new selective plating medium for the selective isolation of P. aeruginosa. Jpn. J. Microbiol. 14:65.

· KING, E.O., M.K. WARD & E.E. RANEY (1954) Two simple media for the demonstration of pyocianin and fluorescein. J. Lab. Clin. Med. 44:301.

· ROBIN, T. & J.M. JANDA (1984) Enhanced recovery of *P. aeruginosa* from diverse clinical specimens on a new selective agar. Diag. Microbiol. Infect Dis. 2:207.

· SCHWEIZERISCHE LEBENMITTELSBUCH (2005) Kap. 56 Mikrobiologie. Bundesamt für Gesundheit. Direktionsbereich Verbraucherschutz. Bern.