Condalab

Reference: 6036 **Technical Data Sheet**

Product: **CFC SUPPLEMENT**

Specification

Sterile selective supplement for the isolation of *Pseudomonas* spp.

Presentation

	Packaging Details	Shelf Life	Storage
10 Freeze-dried vials Vial with: 3 ± 0.1 g	22±0.25 x 55±0.5 mm glass vials, tag labelled, White plastic cap - 10 vials per box.	49 months	2-25 ºC

Composition

Compositon (g/vial)

Cetrimide..... 0.005
Fucidin..... 0.005
Cephalosporin..... 0.025

NOTE : Each vial is sufficient to supplement 500ml of medium Base for *Pseudomonas* spp.

Reconstitute the original freeze-dried vial by adding :
Sterile Distilled Water..... 6 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 makes the medium more selective for Pseudomonas spp. including Burkholderia cepacia.
Cetrimide, fucidin and cephaloridine 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 6 ml sterile diluent in aseptic conditions and add it to 500 ml of agar Base Pseudomonas (ISO) cooled to 50ºC temperature. 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 ºC for 44 ±1 h.
(Incubation times longer than those mentioned above or different incubation temperatures mey 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.

Quality control

Physical/Chemical control

Color : White pH: at 25ºC

Microbiological control

Reconstitute 1 vial as indicated in COMPOSITION; shake and dissolve completely
Add 1 vial to 500 ml of medium base. DO NOT HEAT once supplemented.

Microorganism	Growth
Escherichia coli ATCC® 8739, WDCM 00012	
Ps. fluorescens ATCC®13525	

Sterility Control

Add 5 ml of the sample to:
100 ml TSB and 100 ml Thioglycollate.
Incubation 48 hours at 30-35 ºC and 48 hours at 20-25 ºC: 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.
· EN 12780 Standard (2002) Water Quality. Detection and enumeration of *P. aeruginosa* by membrane filtration.
· 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.
· ISO 16266 Standard (2006) Water Quality. - Detection and enumeration of *Pseudomonas aeruginosa*. - Method by membrane filtration.
· 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.