

Pseudomonas Agar Base

Selective medium for detection and enumeration of *Pseudomonas* spp, according to ISO 13720, ISO/TS 11059 and ISO 16266.

TYPICAL FORMULA	(g/l)
Gelatin Peptone	16.0
Casein Hydrolysate	10.0
Potassium Sulfate, Anhydrous	10.0
Magnesium Chloride, Anhydrous	1.4
Agar	15.0
Final pH 7.1 ± 0.2 at 25°C	

DESCRIPTION

Pseudomonas Agar Base is a medium used with supplements for the selective isolation of *Pseudomonas* spp from meat and dairy products, water, environmental samples and clinical specimens.

The following supplements are added to the medium to comply with specific ISO standards:

CFC (Pseudomonas) Supplement (ref. 81049), for the detection and enumeration of *Pseudomonas* spp in meat and meat products, according to ISO 13270;

Pseudomonas PP Supplement (ref. 81093) for the isolation and enumeration of *Pseudomonas* spp in milk and milk products, according to ISO/TS 11059;

CN (Pseudomonas) Supplement (ref. 81006) for the detection and enumeration of *Pseudomonas aeruginosa* in water samples by using the membrane filtration technique, according to ISO 16266.

PRINCIPLE

Gelatin peptone and casein hydrolysate provide amino acids, nitrogen, carbon, minerals, vitamins and other nutrients for organisms growth. Potassium sulfate and magnesium chloride promote pyocyanin production. Agar is the solidifying agent.

Supplementation with Glycerol Supplement (ref. 80021) supplies a carbon and energy source enhancing pyocyanin production.

CFC Supplement contains Cetrimide, Fusidic Acid and Cefaloridin.

PP Supplement contains Primaricin (Natamycin) and Penicillin G.

CN Supplement contains Cetrimide and Nalidixic Acid.

By use of the appropriate selective supplement and incubation conditions the medium becomes selective for *Pseudomonas* spp, including *Burkholderia cepacia* (CFC Agar and PP Agar), or *Pseudomonas aeruginosa* (CN Agar).

PREPARATION

Melt the content of a bottle in a boiling water bath at 100°C (loosing the caps partially removed) until completely dissolved. Then, screw the cap and check the homogeneity of the dissolved medium, if it is the case turning the bottle upside down.

Cool the medium to 45-50°C before adding supplements as required. Refer to the Technical Sheet of the supplement being used.

Mix well and pour into Petri dishes.

TECHNIQUE

Pseudomonas CFC Agar and Pseudomonas PP Agar

Inoculate the medium by using the spread plate technique. Incubate aerobically at 25 ± 1°C for up to 50 hours.

Pseudomonas CN Agar

Inoculate the medium by using the membrane filtration method. Incubate aerobically at 36 ± 2°C for 40-48 hours.

INTERPRETATION OF RESULTS

All colonies grown on either CFC Agar or PP Agar are suspect *Pseudomonas* spp.

Colonies which result non-glucose fermenters (ref. 88202) and oxidase positive (ref. 88029, 88003 or 88004) are confirmed as *Pseudomonas* spp.

Examine membranes on CN Agar for growth and fluorescence under UV light after 20-24 h and 40-48 h.

Count all colonies that produce the green-blue pigment as confirmed *Pseudomonas aeruginosa*.

Count all non-pyocyanin producing colonies that fluoresce as presumptive *Pseudomonas aeruginosa*. Confirm by using Acetamide Broth (ref. 24154).

Count all other reddish-brown non-pigmented colonies that do not fluoresce as presumptive *Pseudomonas aeruginosa*. Confirm by using the oxidase test, Acetamide Broth and King's B Medium (ref. 11072).

STORAGE

Store bottles at 10-25°C away from light. Do not use the product beyond its expiry date on the label or if product shows any evidence of contamination or any sign of deterioration.



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WARNING AND PRECAUTIONS

For In Vitro Diagnostic use. For professional use only. Operators must be trained and have certain experience in the laboratory methods. Please read the instructions carefully before using this product. Reliability of assay results cannot be guaranteed if there are any deviations from the instructions in this document.

Consult the Safety Data Sheet (SDS) for information regarding hazards and safe handling practices.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to the national and local regulations in force.

REFERENCES

1. EN ISO 11133:2014+Amd1:2018+Amd2:2020. Microbiology of food, animal feed and water – Preparation, production, storage and performance testing of culture media.
2. ISO/TS 11059:2009 (IDF/RM 225: 2009) Milk and milk products – Method for the enumeration of *Pseudomonas* spp.
3. UNI EN ISO 16266:2008. Water quality – Detection and enumeration of *Pseudomonas aeruginosa* by membrane filtration.
4. ISO 13720:1995. Meat and meat products – Enumeration of *Pseudomonas* spp.
5. Mead, G.C. and B.W. Adams (1977) A selective medium for the rapid isolation of *Pseudomonas* associated with poultry meat spoilage. Br. Poult. Sci. 18:661-670
6. Goto S. and S. Enomoto (1970) Nalidixic acid cetrimide agar. A new selective plating medium for the selective isolation of *P. aeruginosa*. Jpn. J. Microbiol. 14:65.



PRODUCT SPECIFICATIONS

NAME

Pseudomonas Agar Base

STORAGE

10-30°C

pH OF THE MEDIUM

7.1 ± 0.2

USE

Pseudomonas Agar Base is a medium used with supplements for the selective isolation of *Pseudomonas* spp from meat and dairy products, water, environmental samples, according to ISO 13720, ISO/TS 11059 and ISO 16266. This medium can be used also for the examination of clinical specimens

SHELF LIFE

2 years

QUALITY CONTROL

Appearance of Medium: Amber, slightly opalescent.

Expected Cultural Response (Inoculum for productivity: 50-100 CFU; Inoculum for selectivity: 10⁴-10⁶ CFU):

Pseudomonas CFC Agar Incubation: 40-48 h / 25 ± 1°C

Microorganism	WDCM	Growth
<i>Pseudomonas fluorescens</i>	WDCM 00115	Good
<i>Pseudomonas fragi</i>	WDCM 00116	Good
<i>Escherichia coli</i>	WDCM 00012	Inhibited

Pseudomonas PP Agar Incubation: 48 ± 2 h / 25 ± 1°C

Microorganism	WDCM	Growth
<i>Pseudomonas fluorescens</i>	WDCM 00115	Good
<i>Pseudomonas aeruginosa</i>	WDCM 00025	Good
<i>Escherichia coli</i>	WDCM 00012	Inhibited











Pseudomonas CN Agar Incubation: 40-48 h / 36 ± 2°C

Microorganism	WDCM	Growth
<i>Pseudomonas aeruginosa</i>	WDCM 00024	Good
<i>Enterococcus faecalis</i>	WDCM 00087	Inhibited
<i>Escherichia coli</i>	WDCM 00013	Inhibited

AVAILABILITY

Ref.	Format	Packaging
412130	Bottle	6 x 200 ml

TABLE OF SYMBOLS

 LOT Batch code	 IVD <i>In vitro</i> Diagnostic Medical Device	 Manufacturer	 Use by	 Fragile, handle with care
 REF Catalogue number	 Temperature limitation	 Contains sufficient for <n> tests	 Caution, consult instructions for use	 Do not reuse



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