#### Pseudomonas Agar Base

#### Intended Use

Pseudomonas Agar Base is a medium with added supplements, used for the selective isolation of *Pseudomonas* species.

## Summary

Pseudomonas Agar Base is a modification of Kings A medium which contains magnesium chloride and potassium sulphate to enhance pigment production. Goto and Enomoto formulated Cetrinix supplement for the selective isolation of *Pseudomonas aeruginosa* from clinical specimens. Lowbury and Collins studied cetrimide as a selective agent. Cetrinix supplement suppresses *Klebsiella*, *Proteus* and *Providencia* species.

#### **Principle**

Casein enzymic hydrolysate and Pancreatic Digest of Gelatin supply nitrogeneous and carbonaceous compounds, long chain amino acids, and other essential growth nutrients. CFC Supplement was formulated by Mead and Adams making the medium specific for isolation of *Pseudomonas* from chilled foods and processing plants, environmental samples and water. This medium is recommended for enumeration of *Pseudomonas* species from meat and meat products.

Formula*
In one dia of

Ingredients	g/L	
Pancreatic Digest of Gelatin	16.0	
Potassium Sulphate	10.0	
Casein enzymic hydrolysate	10.0	
Magnesium Chloride	1.4	
Agar	11.0	
Final pH (at 25°C)	7.1 ± 0.2	
*Adjusted to suit performance parameters.		

## **Storage and Stability**

Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

## Type of Specimen

Food and dairy samples

## **Specimen Collection and Handling**

For clinical samples follow appropriate techniques for handling specimens as per established guidelines. For food and dairy samples, follow appropriate techniques for handling specimens as per established guidelines.

For water samples, follow appropriate techniques for handling specimens as per established guidelines and local standards.

Specimens should be obtained before antimicrobial agents have been administered.

After use, contaminated materials must be sterilized by autoclaving before discarding.

## **Directions**

- 1. Suspend 24.20 g of the powder in 500 mL purified / distilled water containing 5 mL glycerol and mix well.
- 2. Boil with frequent agitation to dissolve the powder completely.

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- 3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
- 4. Cool to 45°C and aseptically add sterile rehydrated contents of 1 vial each either Cetrinix Supplement (204031020001) or CFC Supplement as desired.
- 5. Mix well and pour into sterile petridishes.

Note: Do not keep the molten agar for longer than 4 hours.

# **Quality Control**

**Dehydrated Appearance:** Light yellow coloured, homogenous, free flowing powder. **Prepared Appearance:** Yellow coloured slightly opalescent gel forms in petridishes. **Cultural response:** Cultural characteristics observed with added Cetrinix Supplement after an incubation of 24-48 hours at 30°C-35°C.

Organism (ATCC)	Growth with Cetrinix supplement
Pseudomonas aeruginosa (9027)	Good
Pseudomonas aeruginosa Strain	Good
Boston 41501 (27853)	
Proteus hauseri (13315)	Inhibited
Staphylococcus aureus (6538)	Inhibited
Staphylococcus aureus subsp.	Inhibited
aureus (25923)	

## Interpretation of Results

- 1. Examine inoculated plates after 24 hours and 48 hours using both white and UV light.
- 2. The presence of blue-green or brown pigmentation may be considered as presumptive evidence of *Pseudomonas aeruginosa*.
- 3. Alteromonas species may form brown or pink colonies on the medium.

# Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

- 1. Directions
- 2. Storage
- 3. Expiry

## **Precautions/Limitations**

Due to nutritional variation, some strains may show poor growth.

## Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

## References

- 1. King E.O., Ward M.K. and Raney D.E., 1954, J.Lab and Clin. Med., 44:301.
- 2. Goto S. and Entomoto S., 1970, Jap. J. Microbiol., 14:65.
- 3. Lowbury E.J. and Collins A.G., 1955, Clin. Path., 8:47.
- 4. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

# **Product Presentation:**

Cat No.	Product description	Pack Size
201160310100	Dehydrated Culture Media	100 g
201160310500	Dehydrated Culture Media	500 g

#### Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.