



# MICRONAUT

## ● MICRONAUT-S Pseudomonas MIC

### What can it be used for?

Multi-drug resistance among gram-negative pathogens has increased worldwide in recent years, impacting both hospital and community acquired infections. Bacterial species like *Pseudomonas aeruginosa*, *Acinetobacter* species from the *baumannii* group or *Stenotrophomonas maltophilia* have developed increased resistance or are naturally resistant against many antibiotic agents.

The MICRONAUT-S Pseudomonas MIC AST plate provides an efficient tool for phenotypic susceptibility testing of critically important antibiotics against the mentioned pathogens by broth microdilution (BMD) method.

### Antibiotics

Including critically important antibiotics like ceftazidime-avibactam, ceftolozane-tazobactam and colistin, showing good antimicrobial efficacy against gram-negative bacteria.

Amikacin  
Aztreonam  
Cefepime  
Ceftazidime  
Ceftazidime-avibactam  
Ceftolozane-tazobactam  
Ciprofloxacin  
Colistin  
Fosfomycin

Gentamicin  
Imipenem  
Levofloxacin  
Meropenem  
Piperacillin  
Piperacillin-tazobactam  
Tobramycin  
Trimethoprim-sulfamethoxazole

Manufactured by  


## Features and benefits

- Standardized MIC determination by BMD for a broad spectrum of antibiotics like ceftazidime-avibactam, ceftolozane-tazobactam, colistin and other critically important antibiotic agents
- Due to the spectrum of antibiotics, the MIC plate is appropriate for testing non-fermenting organisms like *Pseudomonas aeruginosa*, *Acinetobacter* species from the *baumannii* group or *Stenotrophomonas maltophilia*
- Reading and evaluation of the AST results can be performed visually or photometrically
- The MICRONAUT software provides reading, evaluation and interpretation according to the latest EUCAST or CLSI criteria

## Procedure

- Prepare a 0.5 McFarland standard bacteria suspension in NaCl
- Transfer an aliquot into Mueller-Hinton II Broth (CAMHB)
- Inoculate the MICRONAUT-S *Pseudomonas* MIC plate
- Incubate for 18-22 hours at 35-37°C
- Read the results visually or measure photometrically

## Shelf life and storage

- Shelf life: 24 months from date of production
- Storage: at room temperature (15-25°C)

### Antibiotics & Concentrations (mg/L)

<b>Amikacin</b>	32	16	8	4	-	-	-	-
<b>Aztreonam</b>	16	8	4	1	-	-	-	-
<b>Cefepime</b>	8	4	2	1	-	-	-	-
<b>Ceftazidime</b>	32	16	8	4	2	1	0.5	0.25
<b>Ceftazidime-avibactam</b>	8/4	4/4	2/4	1/4	-	-	-	-
<b>Ceftolozane-tazobactam</b>	8/4	4/4	2/4	1/4	-	-	-	-
<b>Ciprofloxacin</b>	8	4	2	1	0.5	0.25	0.125	0.06
<b>Colistin</b>	8	4	2	1	-	-	-	-
<b>Fosfomicin</b>	128	64	32	16	-	-	-	-
<b>Gentamicin</b>	32	16	8	4	2	1	0.5	0.25
<b>Imipenem</b>	8	4	2	1	-	-	-	-
<b>Levofloxacin</b>	8	4	2	1	0.5	0.25	0.125	-
<b>Meropenem</b>	16	8	4	2	1	0.5	0.25	0.125
<b>Piperacillin</b>	32	16	8	4	-	-	-	-
<b>Piperacillin-tazobactam</b>	128/4	64/4	32/4	16/4	8/4	4/4	2/4	1/4
<b>Tobramycin</b>	32	16	8	4	2	1	0.5	0.25
<b>Trimethoprim-sulfamethoxazole</b>	8/152	4/76	2/38	1/19	-	-	-	-

### Order Information

#### MICRONAUT-S *Pseudomonas* MIC

1 test per plate, 40 plates per box / Part No. E1-221-040

#### Mueller-Hinton Broth, cation adjusted

1 tube per test, 20 tubes per box / Part No. E2-331-020

1 tube per test, 100 tubes per box / Part No. E2-331-100

Please contact your local representative for availability in your country. Not for sale in the USA.



Kleinstraße 14  
53332 Bornheim - Germany  
Phone +49 (0) 2222-9631-0  
Fax +49 (0) 2222-9631-90



[info.merlin@bruker.com](mailto:info.merlin@bruker.com) - [www.merlin-diagnostika.de](http://www.merlin-diagnostika.de)