



# MICRONAUT

- MIC-Strip Colistin

## What can it be used for?

The MICRONAUT MIC-Strip Colistin enables antimicrobial susceptibility testing against the back-up antibiotic colistin by using the broth microdilution (BMD) method, as advised by EUCAST, for *Enterobacteriaceae*, *Pseudomonas aeruginosa*, and *Acinetobacter baumannii* group.

Antimicrobial susceptibility testing of colistin has been routinely fraught with difficulties until now. A joint EUCAST and CLSI subcommittee recently issued recommendations confirming that

BMD is currently the only valid method for MIC determination of colistin. Gradient tests and disk diffusion methods are not recommended because of the poor diffusion of the large colistin molecule that could lead to an underestimated MIC value[1].

### Colistin concentration range

0.0625 to 64 mg/L

Manufactured by  
The Merlin logo, featuring a stylized blue star or 'M' shape to the left of the word "MERLIN" in a bold, blue, sans-serif font.

## Features and benefits

- Phenotypic detection of colistin resistance (e.g. MCR-1)
- Standardized MIC determination of colistin in routine laboratory diagnostics according to EUCAST recommendations
- The strip format permits economic use of the AST adapted to the individual laboratory diagnostic requirements
- Easy handling combined with standard laboratory equipment, for high quality MIC colistin results
- No special expertise required, easy visual evaluation

## Procedure

- Prepare a 0.5 McFarland bacterial suspension in NaCl
- Transfer an aliquot into Mueller-Hinton II broth (CAMHB)
- Inoculate the appropriate number of MIC-Strips
- Incubate for 18-22 hours at 35-37°C
- Read the results visually

## Shelf life and storage

- Shelf life: 24 months from date of production (unopened), expires 8 weeks after opening
- Storage: at room temperature (15-25°C)

## International ISO standard method

- MICRONAUT is a broth microdilution system using the international reference methodology (ISO 20776-1). MIC levels are based on EUCAST guidelines where applicable.

### Reference:

[1] Antimicrobial susceptibility testing of colistin – evaluation of seven commercial MIC products against standard broth microdilution for *Escherichia coli*, *Klebsiella pneumoniae*, *Pseudomonas aeruginosa*, and *Acinetobacter spp.* Matuschek E, Åhman J, Webster C, Kahlmeter G, CMI (2018), 24(8):865-870



### Colistin (COL) concentration (mg/L)

1	2	3	4	5	6	7	8	9	10	11	12
GC	COL	COL	COL	COL	COL	COL	COL	COL	COL	COL	COL
	0.0625	0.125	0.25	0.5	1	2	4	8	16	32	64

### Order Information

#### MICRONAUT MIC-Strip Colistin

5 plates, 8 strips per plate (40 tests per box) / Part No EM-006-040

#### 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



### MERLIN Diagnostika GmbH

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)