



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 Enterobacterales, *Pseudomonas aeruginosa*, and *Acinetobacter baumannii* group.

Antimicrobial susceptibility testing of colistin has been fraught with difficulties. 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 logo for Merlin, featuring the word "MERLIN" in a bold, blue, sans-serif font. To the left of the text is a blue graphic of a stylized star or comet tail pointing upwards and to the right.

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 allows for an economic use of the AST adapted to the individual laboratory diagnostic requirements
- Easy handling combined with basic equipment, for high quality MIC colistin results
- No special expertise required, easy visual evaluation

Procedure

- Prepare a 0.5 McFarland bacteria suspension in NaCl
- Transfer an aliquot into Mueller-Hinton II broth (CAMHB)
- Inoculate the appropriate number of MIC-Strips
- Incubate for 18-24 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, CMI2018 in press :DOI: <https://doi.org/10.1016/j.cmi.2017.11.020>



Colistin 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



● MERLIN Diagnostika GmbH

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

info.merlin@bruker.com www.merlin-diagnostika.de