



# MIC Test Strip Technical Sheet **Fastidious Gram Negative Bacilli**

*Bartonella, Bordetella, Capnocytophaga, Legionella and Pasteurella* spp.

## Specimen

Abscess, Blood, sterile sites (fluids and tissues).

## Procedure

<b>Medium</b>	<i>Bartonella</i> spp: Mueller Hinton Chocolate, Ref 10335. <i>Bordetella</i> : Mueller Hinton II Agar (Sheep Blood 5%), Ref. 10131. <i>Capnocytophaga</i> spp: Brucella Blood Agar, Ref. 10245. <i>Legionella</i> spp: Legionella BCYE Agar, Ref. 10051. <i>Pasteurella</i> spp: Mueller Hinton II Agar (Sheep Blood 5%), Ref. 10131 or Mueller Hinton Fastidious Agar (Horse blood 5%+ 20 mg/L β-NAD), Ref. 10132.
<b>Inoculum</b>	Suspension in Mueller Hinton Broth, Ref. 24107. <i>Legionella</i> spp: 0.5-1 McFarland, Ref. 80405. <i>Bartonella, Capnocytophaga, and Pasteurella</i> spp: 1 McFarland, Ref. 80405. <i>Bordetella</i> spp: 3 McFarland, Ref. 80405.
<b>Incubation</b>	<i>Bartonella</i> spp: 35 ± 2°C/ 5%CO <sub>2</sub> / 3-5 d. <i>Bordetella</i> and <i>Legionella</i> spp: 35 ± 2°C/ ambient in bags (moist) / 3-5 d. <i>Capnocytophaga</i> and <i>Pasteurella</i> spp: 35 ± 2°C/ 5%CO <sub>2</sub> / 48 h.
<b>Evaluating the results</b>	Bactericidal drugs: interpret the M.I.C. at complete growth inhibition including microcolonies, hazes and isolated colonies. Bacteriostatic drugs: interpret the M.I.C. at 80% inhibition when trailing is seen.

		Quality Control (MIC µg/mL)	CLSI INTERPRETATION MIC Criteria (µg/mL)			EUCAST INTERPRETATION MIC Criteria (µg/mL)		Example of ANTIBIOGRAM
		<i>S. pneumoniae</i> ATCC® 49619	S	I	R	S	R	140 mm petri dish
<b><i>Pasteurella multocida</i></b>	<b>P</b> PENICILLIN G	0.25-1	≤0.5	-	-	≤0.5	>0.5	✓
	<b>AMP</b> AMPICILLIN	0.06-0.25	≤0.5	-	-	≤1	>1	
	<b>LEV</b> LEVOFLOXACIN	0.5-2	≤0.06	-	-	≤0.06	>0.06	✓
	<b>DXT</b> DOXYCYCLINE	0.016-0.12	≤0.5	-	-	≤1	>1	✓
	<b>SXT</b> TRIMETHOPRIM-SULFAMETHOXAZOLE (1/19)	0.12-1	≤0.5	-	-	≤0.25	>0.25	✓

Susceptible (S), Intermediate (I), Resistant (R)

**Note:** For combination agents, MIC values are expressed as the concentration of the first component of the combination.

**Disclaimer:** The table is intended for general guidance only and may not contain all the necessary information. Also reported interpretive criteria and QC MIC ranges might be out of date. Always current guidelines from CLSI and/or EUCAST should be consulted.

## References

1. EUCAST. Guidance document on Antimicrobial Susceptibility Testing of *Legionella pneumophila*. May 2021.
2. CLSI M100. Performance Standards for Antimicrobial Susceptibility Testing. 31st Edition, 2021.
3. EUCAST. Breakpoint tables for interpretation of MICs and zone diameters. Version 11.0, 2021.
4. Routine and extended internal quality control for MIC determination and disk diffusion as recommended by EUCAST. Version 11.0, 2021.
5. CLSI M07. Methods for Dilution Antimicrobial Susceptibility Tests for Bacteria That Grow Aerobically. 11th Edition, 2018.
6. CLSI M45. Methods for Antimicrobial Dilutions and Disk Susceptibility Testing of Infrequently Isolated or Fastidious Bacteria; 3rd Edition, 2016.

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