



MIC Test Strip Technical Sheet *Helicobacter pylori*

Specimen

Stomach biopsy, composed of samples from multiple sites.

Medium	Mueller Hinton II Agar (Sheep blood 5%), ref. 10131 or Mueller Hinton Fastidious Agar (Horse blood 5% + 20 mg/L β -NAD), ref. 10132.
Inoculum	72 h (or older) viable colonies are suspended in broth (Mueller Hinton or other) supplemented with 5% serum; adjust turbidity to 3 McFarland. Use 1 MIC Test Strip per 90 mm plate; position the handle of the strip against the edge of the plate.
Incubation	35 \pm 2°C/ microaerophilic (atmosphere produced by a gas-generating system suitable for Campylobacter) 72 hours (or longer i.e. until a visible inhibition ellipse is seen). For metronidazole, a 24 hours anaerobic pre-incubation followed by 48 hours or longer microaerophilic incubation has been recommended by some investigators as a better option.
Reading precautions	<i>H. pylori</i> colonies are pin-point, translucent and difficult to see. Tilt the plate and/or use oblique light or a magnifying glass when reading the M.I.C. endpoint. Bactericidal drugs: interpret the M.I.C. at the point of complete inhibition of all growth, including microcolonies, hazes and isolated colonies. Bacteriostatic drugs: interpret the M.I.C. of hazy zone edges at 80% inhibition.

	Quality Control (M.I.C. μ g/mL) <i>H. pylori</i> ATCC® 43504	CLSI INTERPRETATION M.I.C. Criteria (μ g/mL)			EUCAST INTERPRETATION M.I.C. Criteria (μ g/mL)		Example of ANTIBIOGRAM 140 mm petri dish
		S	I	R	S	R	
AML AMOXICILLIN	0.015-0.12				\leq 0.125	$>$ 0.125	✓
CLR CLARITHROMYCIN	0.015-0.12	\leq 0.25	0.5	\geq 1	\leq 0.25	$>$ 0.5	✓
MTZ METRONIDAZOLE	64-256				\leq 8	$>$ 8	✓
TE TETRACYCLINE	0.12-1				\leq 1	$>$ 1	✓

References

- CLSI M100-S20, 2010. Performance Standards for Antimicrobial Susceptibility Testing.
- EUCAST. Breakpoint tables for interpretation of MICs and zone diameters. Version 6.0, 2016.

MIC Test Strip, Patent No. 1395483



LIOFILCHEM® s.r.l.

Via Scozia zona ind.le, 64026 Roseto degli Abruzzi (Te) Italy
Tel. +39 0858930745 Fax +39 0858930330 www.liofilchem.net liofilchem@liofilchem.net

