

Helicobacter pylori

In the USA, For Investigational Use Only

SPECIMEN	Stomach biopsy, composed of samples from multiple sites.		
PROCEDURE	Agar medium	Mueller Hinton + 5% blood, aged ≥ 2 weeks ¹⁾ . Observe: Mueller Hinton BD brand is recommended due to minimal batch to batch variation for antimicrobial susceptibility testing purposes Ensure that the media supports good growth, gives reproducible results and fulfils QC specifications.	
	Inoculum	72 h (or older) viable colonies are suspended in broth (Mueller Hinton or other) supplemented with 5% serum; adjust turbidity to 3 McFarland.	
	Application	Use 1 Etest® strip per 90 mm plate; position the handle of the strip against the edge of the plate.	
	Incubation	35 °C/ microaerophilic (GasPak® -Cfj - campylobacter)/ 72 hours (or longer i.e. until a visible inhibition ellipse is seen). For metronidazole, an anaerobic pre-incubation for 24h followed by microaerophilic incubation for 48h (or longer) has been recommended by some investigators as a better option.	

LITERATURE Package insert, product labels, Etest Application, Reading & Trouble Shooting guides and Etest reference list.

QUALITY CONTROL (MIC µg/ml) ¹⁾	<i>H. pylori</i> ATCC® 43504			<i>H. pylori</i> ATCC® 43504		
	AC	CH		MZ	TC	
Amoxicillin	0.016-0.125			64-256		
Clarithromycin		0.016-0.125		0.125-1		

INTERPRETATION MIC Criteria (µg/ml)	S I R			S I R		
	Amoxicillin ²⁾	Clarithromycin ¹⁾		Metronidazole ²⁾	Tetracycline ²⁾	
	≤1	≤0.25	≥1	≤4	≤2	≥4

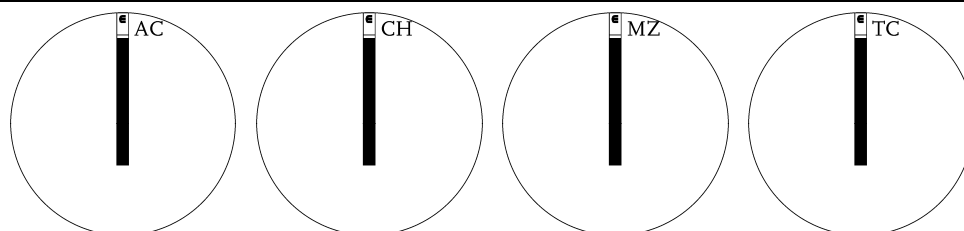
Notes

1. CLSI M100-S18, 2008.
2. BSAC Methods for Antimicrobial Susceptibility Testing. Version 7, 2008.

READING PRECAUTIONS

1. *H. pylori* colonies are pin-point, translucent and difficult to see. Tilt the plate and/or use oblique light or a magnifying glass when reading the MIC endpoint.
2. For bactericidal drugs, always read the MIC at the point of complete inhibition of all growth, including microcolonies, hazes and isolated colonies.
3. For bacteriostatic drugs, read the MIC of hazy zone edges at 80% inhibition.

ANTIBIOGRAMS



Example only, please use your own antibiotic formulary.

REFERENCES

1. Glupczynski *et al.* (1991). Evaluation of the Etest for quantitative antimicrobial susceptibility testing of *Helicobacter pylori*. *JCM*. **29**(9): 2072-2075.
2. Hirschl *et al.* (1993). Comparison of three methods for the determination of the sensitivity of *Helicobacter pylori* to metronidazole. *JAC*. **32**: 45-49.
3. Piccolomini *et al.* (1997). Comparative evaluation of the Etest, agar dilution and broth microdilution for testing susceptibilities of *H. pylori* strains to 20 antimicrobial agents. *JCM*. **35**(7): 1842-1846.