

MIC Test Strip Technical Sheet Mould

Specimen

Blood, CSF, sterile body fluids and tissues, nasopharynx, respiratory, urinary and gastrointestinal tracts.

	Aspergillus spp.	Fusarium spp.	Rhizopus spp.	other species						
Medium	RPMI Agar (Ref. 11509)									
Inoculum	Suspension of conidia and hyphae (mature growth 5-7 days) in saline with Tween 20 (Ref. 80032)									
	0.5 McFarland (Ref. 80400)	1 McFarland (Ref. 80401)	1 McFarland (Ref. 80401)							
Incubation	35 ± 2 °C / moist ambient air (plates in plastic bag) / 16-72 hours, depending on the genus.									
	16-24 hours.	35 ± 2 °C / 24-48 hours followed by room temperature for another 24-48 hours.	16-24 hours.	Extend incubation time as needed and inspect plates daily for growth and presence of an inhibition ellipse.						
Interpretation of results	Interpret results after 16-24 hours, confirm at 48 hours if needed. Slow growers may need up to 72 hours. Read the M.I.C. where the inhibition ellipse intersects the M.I.C. scale. For amphotericin B, read complete inhibition of growth and azoles at 80% inhibition. Ignore filaments bending into the ellipse which may be caused by overgrowth in case of prolonged incubation.									

		Quality Control (MIC µg/mL) 48 hours incubation			CLSI INTERPRETATION MIC Criteria (µg/mL)		EUCAST INTERPRETATION MIC Criteria (µg/mL)		Example of ANTIBIOGRAM	
		C. parapsilosis ATCC® 22019	A. flavus ATCC® 204304	A. fumigatus ATCC® MY A-3626	S	1	R	S	R	90 mm petri dish
AMB	AMPHOTERICIN B A. fumigatus A. niger	0.25-1	0.5-4	0.5-4				≤1 ≤1	>2 >2	✓
FLU	FLUCONAZOLE	1-8	-	-						
FC	FLUCYTOSINE	0.064-0.25	-	-						
ITC	ITRACONAZOLE A. flavus A. fumigatus A. nidulans A. terreus	0.064-0.25	0.25-0.5	0.25-2				≤1 ≤1 ≤1 ≤1	>2 >2 >2 >2 >2	✓
KE	KETOCONAZOLE	0.032-0.125	-	-						
POS	POSACONAZOLE A. fumigatus A. terreus	0.032-0.25	0.06-0.5	-				≤0.12 ≤0.12	>0.25 >0.25	
VO	VORICONAZOLE A. fumigatus	0.016-0.064	0.5-4	0.25-1	≤0.5	1	≥2	≤1	>2	

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

Note: Antifungal MTS quality control data are not identical to CLSI or EUCAST specifications in all cases. MTS ranges at 48 hours are based on extensive data generated from in house testing.

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 Also reported interpretive criteria and QC MIC ranges might be out of date.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. CLSI M61. Performance Standards for Antifungal Susceptibility Testing of Filamentous Fungi. 2nd Edition, 2020.
- 2. EUCAST. Antifungal Agents. Breakpoint tables for interpretation of MICs. Version 9.0, 2018.

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