

Cefiderocol Disk Diffusion: How to Read Zone of Inhibition Results

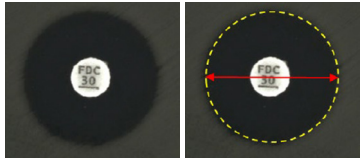
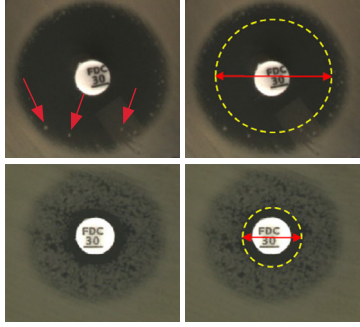
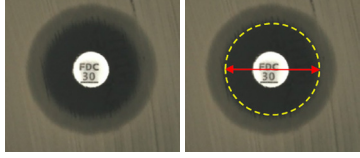


GUIDING PRINCIPLE

Any colonies within the clearance should not be ignored. When two distinct zones are present, only the inner, clearly defined zone free from colonies should be measured as the zone of inhibition.

Where it's clear, measure here.

READING DIFFERENT GROWTH PATTERNS

Pattern		What you see	What to measure
Clear zone		Unobstructed circular clearing	Outer edges of the clear zone
Inner colonies		Discrete colonies within the clearing	Inner zone free of colonies
Hazy/blurred edges		Diffuse growth within the clearing	Inner zone free of any bacterial growth

Note: Images not to scale. Cefiderocol disk diffusion images reproduced with permission from Laboratory Specialists, Inc. No endorsement implied.

NOTES ON AGAR AND DISK SELECTION



- Normal Mueller-Hinton agar should be used – no need for iron-depleted agar
- BD BBL™ agar provides the highest MIC correlation (using CLSI breakpoints)
- Caution with Bio-Rad agar and Hardy agar (for *P. aeruginosa* only) – larger zones of inhibition, possibly overestimating susceptibility
- Caution with Thermo Fisher Oxoid™ disks – larger zones of inhibition, possibly overestimating susceptibility
- Avoid Oxoid disks with Bio-Rad agar

ADDITIONAL RESOURCES



Cefiderocol Microbiology Resource Center



Shionogi Medical Affairs Website

Supporting References

1. CLSI. Performance Standards for Antimicrobial Disk Susceptibility Tests, 14th Edition. M02. 2024. 2. Potter RF, et al. *J Appl Lab Med*. 2023;8(3):523-534. 3. DeJonge BLM, et al. ASM Microbe 2025. June 19–23, 2025. Los Angeles, CA. Poster 111. 4. DeMarco MG, et al. *J Clin Microbiol*. 2025;63(5):e0164824. 5. EUCAST. <https://www.eucast.org/warning-detail/cefiderocol-eucast-has-evaluated-august-2022-commercially-available-tests-and-all-have-problems-with-accuracy-reproducibility-bias-and-or-for-some-with-skipped-wells/>. Accessed May 20, 2026.

CLSI=Clinical and Laboratory Standards Institute; MIC=minimum inhibitory concentration.