

FAQs for IDs

Q: How long does it take to perform an identification?

A: The turnaround time for an identification depends on the system used. Identifications performed on the MIDI system take approximately 10 days, whereas those on the Vitek system take 5-7 days. Results may also be obtained within 72 hours on the Vitek system with an additional STAT fee.

Q: How do the Vitek and the MIDI system compare?

A: Both systems have slightly different libraries; however, both will identify an organism to the same genus level. The Vitek system has a more current library so often the species names between the two systems may differ.

Q: Should I use the Vitek or MIDI system?

A: This is a decision that must be made based on your testing needs.



The Vitek system is an automated, closed system which compares organisms based on a wide variety of biochemical reactions. Minimal preparation is required, leaving less room for technician error and more rapid results. Gram positive, Gram negative, *Bacillus* species, and yeasts are all included in the database. *Staphylococcus* species are readily identified, including *S. aureus*. However, the Vitek does not accurately identify many Gram positive, non-spore forming rods or *Bacillus atrophaeus*. A gram stain is required in order to determine the appropriate card to run an unknown organism on.

The MIDI system compares organisms based on the fatty acid composition. It contains an extensive library of 695 environmental and 430 clinical organisms. Each organism is compared to the entire environmental or clinical library without needing a gram stain. The MIDI has comparison features such as creating dendograms in order to compare named organisms for relatedness. The MIDI is unable to accurately identify yeasts and enteric organisms.

Q: How do I interpret the results?

A: Vitek results will show an organism selection with a percent probability and a confidence level of the identification. The percent probability and confidence level are based on how closely the exhibited biopattern matches that of a known organism in the database. If the biopattern is similar to multiple organisms in the database the confidence level decreases.

MIDI results use a similarity index with a range of 0 to 1.000 to indicate how closely an unknown organism matches known organisms in the library. A match of 0.500 or greater is considered a good match to the known organism in the library.

Please feel free to call the lab directly for information concerning specific organisms or study related questions.

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