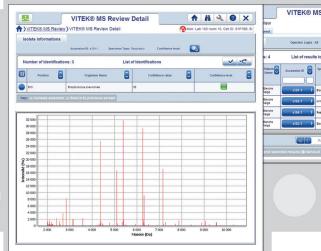






# xible integration with VITEK® 2 AST you need, when you need them



Slide





Facilitates the validation of results as all necessary details are at your fingertips, even if working remotely.

# ly.

# The VITEK® MS advantages: Rapid Identification, Flexibility and Traceability

## Identification results within minutes

Microbial identification is achieved by obtaining spectra using MALDI-TOF technology (Matrix Assisted Laser Desorption Ionization Time-of-Flight) and analyzing the spectra with the VITEK® MS database. The peaks from these spectra are compared to the characteristic pattern for a species, genus, or family of microorganism, thus resulting in organism identification.

The VITEK® MS database is comprised of a large number of clinically relevant micro-organisms.

Furthermore, our proprietary algorithm vastly increases accurate identification of micro-organisms. In addition, other benefits associated with the VITEK® MS include:

- Protein extraction, if needed can be performed directly on the target slide
- Disposable slides do not require cleaning or cleaning supplies
- High resolution of the mass signals leads to better results
- High sensitivity in the >10k Dalton range

# Mass Spectrometry Sample: Emphy Sample: Emphy Organism ID: No organism

# **Security and Traceability**

VITEK® MS includes the VITEK® MS Prep Station to securely link specimen information with each spot on the target slide and to the VITEK® 2 cassette position:

- Disposable target slides with unique barcodes minimize manual data entry
- Dedicated positions on the target slides for calibration
- Generation of electronic worksheets during set up

# Flexibility and Efficiency

With Myla software, easily integrate VITEK® MS and VITEK® 2.

- Up to four target slides with 48 positions each can be analyzed in parallel in the system allowing testing of 192 isolates in one run
- Connection to VITEK® 2 automatically links the VITEK® MS identification result with the VITEK® 2 AST result
- User friendly software greatly facilitates workflow from sample preparation, loading to specimen analysis
- Have ready access to information increasing productivity



The principle behind the VITEK® MS for identification of microorganisms is more than 20 years old. Working directly with AnagnosTec and Shimadzu, two pioneers in the field of bacterial identification using mass spectrometry, bioMérieux offers VITEK® MS with the same high standards you expect

- 1988: first commercially available MALDI-TOF system from
- 1998: AnagnosTec develops the SARAMIS™ Database
- 2000: European patent for the SARAMIS™ Database
- 2002: Koichi Tanaka (Shimadzu) wins the Nobel Prize for Soft Laser Desorption\*
- \* Desorption of large molecules that results in ionization without the formation of fragment ions.

### **Dimensions**

- Size (w h d) 0.7 m x 1.92 m x 0.85 m minimum distance to wall at back is 100 mm
- Weight 330 kg excluding data system

### **Installation Requirements**

- Electrical 200 VAC, 50/60 Hz, 1000 VA single phase OR 230 VAC, 50/60 Hz, 1000 VA single phase
- A "clean", stable and continuous mains supply is required for reliable operation
- Temperature ambient 18° to 26° Celsius
- Relative humidity less than 70% non condensing
- Vibration free, firm, level floor, at least 330 kg supported at four points

## Laser

- 337 nm nitrogen laser, fixed focus
- 3 ns pulse rate 50Hz (50 laser shots per second)
- Near normal (on-axis) incidence of the laser beam to the sample · Laser power and laser aim under software control
- Analyzer
- Linear flight tube of 1.2 m drift length
- Vacuum maintained by two turbomolecular pumps (nominal 250 l/s)
- Beam blanking to deflect unwanted high intensity signals e.g. matrix ions

### Mass range

1 to 500 kDa

bioMérieux S.A. 69280 Marcy l'Etoile

France

Tel.: 33 (0)4 78 87 20 00 Fax: 33 (0)4 78 87 20 90



