



EXS2600 Mass Spectrometry System

A Convenient and Efficient Tool for Microbial Labs



Microbiology



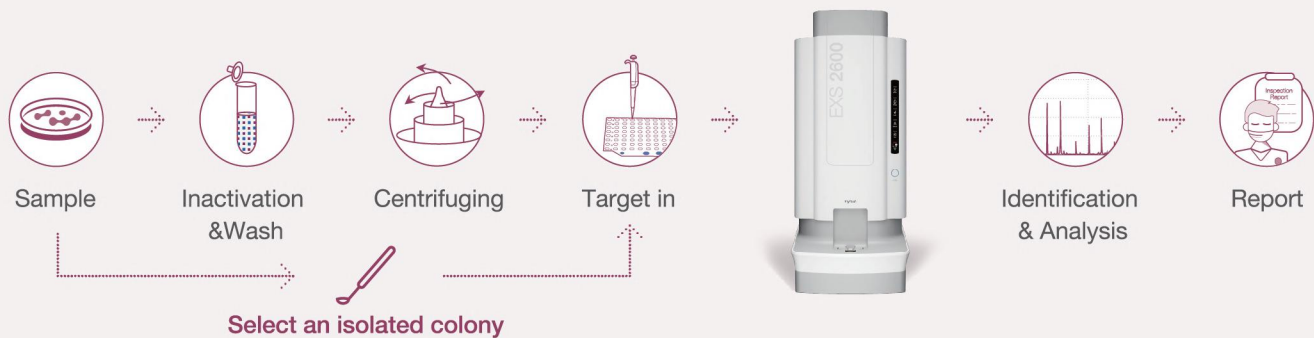
EXS2600 Mass Spectrometry System

Based on matrix-assisted laser desorption/ionization time-of-flight mass spectrometry technology, EXS2600 is used in diagnostic identification for microbes, include several kinds of bacteria, fungi, molds and etc.. Compared with traditional microbe diagnosis method, EXS2600 mass spectrometry system could offer our end-user high-throughput screening, convenient operation and more sensitive and accurate identification result via advanced sample pretreatment kit technology, user-friendly software and comprehensive strains database.



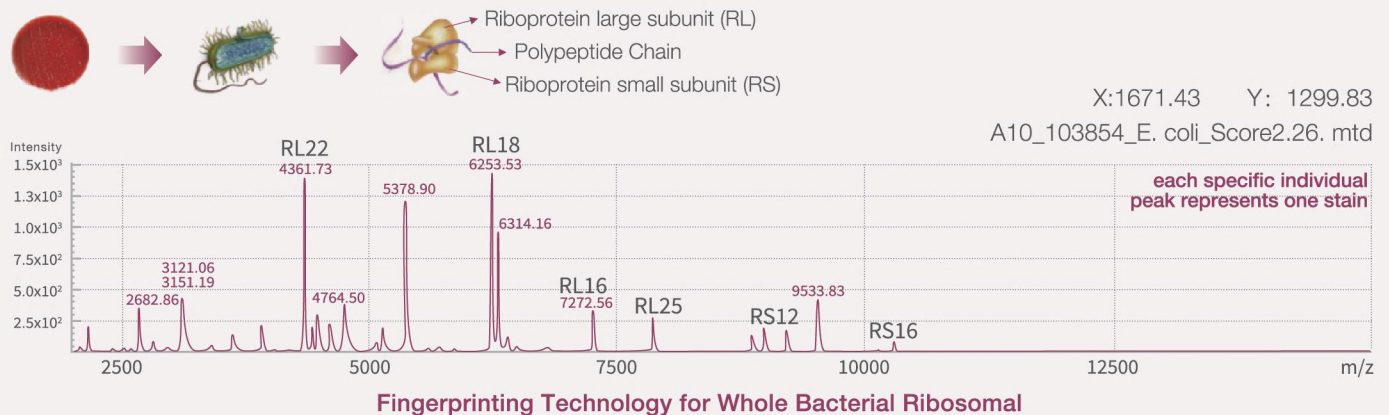
How to identify a microorganism in EXS2600?

Convenient operation for several kinds of microbe, it could help doctor to rapidly get identification result for rational medicine use.

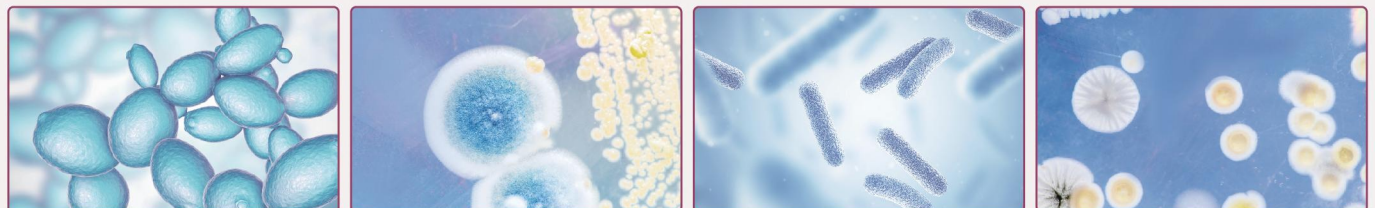


Peptide Mass Fingerprinting (PMF)

The peptide mass fingerprinting (PMF) is a high throughput protein identification technique, which could help get an accurate subject strain identification result via testing the peak list of to-be-test microbe and algorithmically comparing it with the reference in the database.

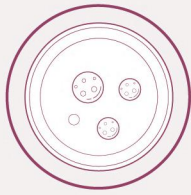


A Broad Range of Application Fields



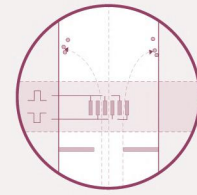
- Clinical inpatient, outpatient and emergency department for microbial identification
- Hospital Infection Prevention and Control
- Microorganism identification and monitor traceability in CDC
- Microorganism detection and quality control in pharmaceutical or food factory
- Microbiological testing and research in the fields of scientific research, industry, agriculture, environment, animal husbandry and veterinary medicine
- Inspection and quarantine field

Highlight Feature



Accurate result

- Intuitively and synchronously display identification result and morphological reference.
- Clinical database including over 4,051 species, covering 15000 strains to account for diversity greater accuracy.
- 300 kinds of specialty bacteria covering filamentous fungi, yeasts, noca bacteria, legionella and etc.
- Customize database to meet need of different microbial labs.



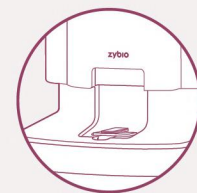
Reliable hardware performance

- Vacuum pump without oil is free of maintenance and less cost.
- Distinctive integrated circuit design to improve signal-to-noise ratio and reduce error rate.
- Advanced hyper-efficient ion propulsion patent technology to improve ion transmission capacity and increase the sensitivity and resolution of mass spectrometry systems.
- Flight tube temperature compensation technology to ensure the stability of the instrument.



Cost-effective Tool

- Acquisition and identification function realized in one application software.
- Target plate is reusable that help to save cost and could add sample at 96 spot at most at the same time.
- Strains identification applied in EXS2600 makes turn-around-time from about two days to 15min, which save more time for doctor to give medicine and even rescue critical patients.



Convenient operation

- One step to target-in for detection with reusable and traceable plate.
- Rapidly test 96 samples in one plate only within 12 min.
- Freely set control target location for monitoring process.
- Several sample pretreatment reagent selection for several microbes

Highlight Feature



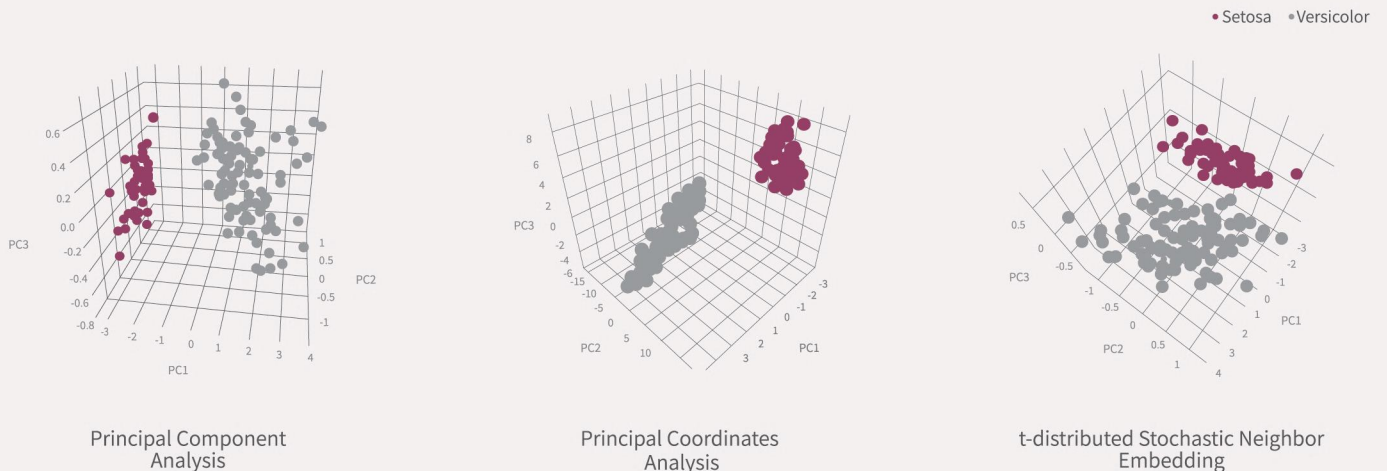
Advanced and distinctive microbe pretreatment reagent technology

- Less pretreatment procedure and more effectively break down dense mold cell walls, which takes less than 2 min for mold identification.
- Directly identify the microbe from blood culture positive bottle without subculture again.
- Ready-to-use matrix solution, good stability and room temperature storage.

Name	Storage Temperature	Shelf Life	Open-vial Stability
Microbe Sample Pretreatment Kit	15-25°C	12 months	7 days
Mold Sample Pretreatment Kit	15-25°C	12 months	7 days
Blood Culture Positive Sample Pretreatment Kit	2-8°C	12 months	30 days
Sample Treatment Matrix Solution	15-25°C	12 months	7 days
Sample Pretreatment Solution	4-25°C	12 months	90 days
Microbiology Calibrator	-20±5°C	12 months	-20±5°C 30 days 2-8 °C 7 days

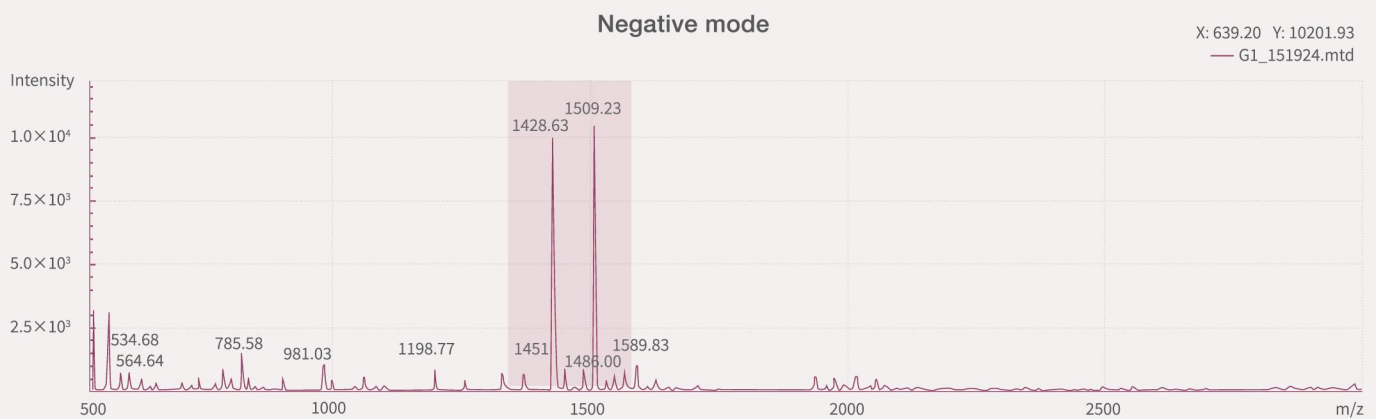
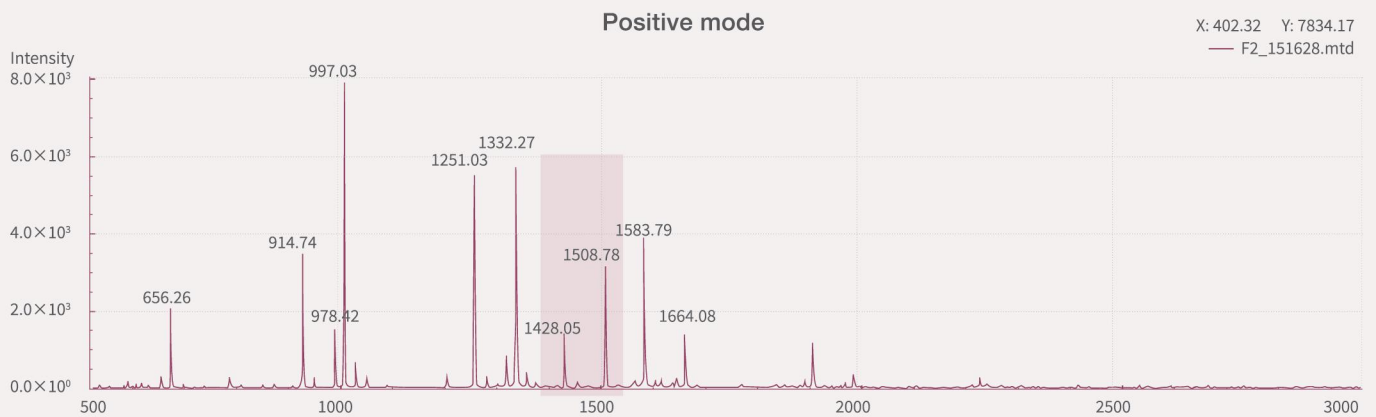
More Function for RUO : Cluster Analysis Software

- Combined with principal component analysis, EXS2600 could apply in clinical research such as antibiotic-resistant bacteria research, serotypes, strain traceability analysis and difficult-to-identified bacteria.



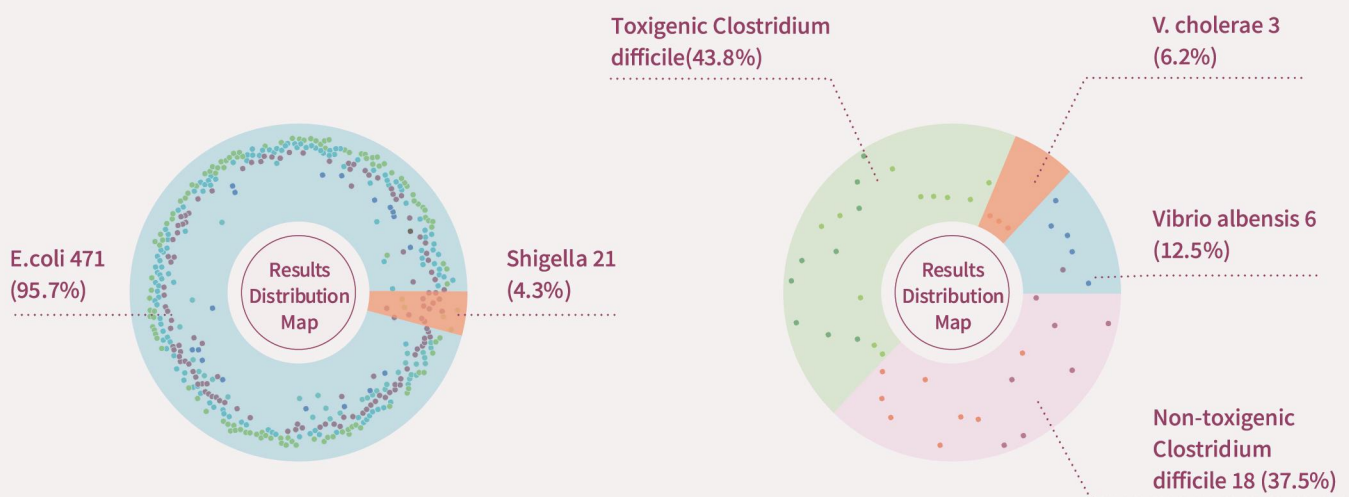
Positive & Negative Ion Detector

- Positive & negative ion mode could be applied in the phosphate protein detection among antibiotic-resistant bacteria and drug sensitivity analysis.



Artificial Intelligence Typing Software

- Combined with artificial intelligence algorithms, microbial intelligent type software show excellent performance for routine microbe and also could help to identify some difficult-to-identify bacteria, such as E.coli and Shigella.



Technical Specification

Work Principal	MALDI-TOF
M/Z Range	1,500 - 30,000 Da
Mass Accuracy	Relative Indication Error ≤500 ppm
Sensitivity	S/N ratio ≥100 (0.04 µg/mL, [Glu1]-human fibrin peptide B) S/N ratio ≥100 (4 µg/mL, horse myoglobin)
Mass Resolution	R ≥500
Repeatability	≤600 ppm
Mass Stability	≤800 ppm
Laser	Nitrogen Laser 60 Hz Repetition rate 400 million laser shot
Pump	Oil-free turbomolecular pump (340 l/s), Vacuum up to 10 ⁻⁸ mbar.
Pre-treatment Reagents	Microbe Sample Pretreatment Kit, Mold Sample Pretreatment Kit Blood Culture Positive Sample Pretreatment Kit, Sample Treatment Matrix Solution
Strains database	≥4,051 species, 15000 strains in local database
Operation Environment	Temperature: (10-30)°C Relative Humidity: (20-85)% Atmospheric Pressure: (70-106)Kpa
Target-in/out Time	≤1 min
Throughput	Test 96 samples in one plate within 12 min
Operation System	Windows 7(64 bit) and above, support LIS
Power Supply	100-240 V, 50/60 Hz, 300 W
Weight	116.1 Kg
Dimension (mm)	490(W) *800(D) *1215(H)



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