MALDI-TOF Database
MALDI-TOF MS
Applications
- Foodborne Pathogens
- Spoilage Organisms
- Yeasts and Molds

For safer food - BIOTECON Diagnostics
Simple and fast identification of microorganisms

The analysis of biomolecules with MALDI time of flight mass spectrometry or shortly MALDI-TOF MS has become broadly accepted in routine laboratories around the world. Thanks to a pretty simple straightforward sample preparation protocol of freshly growing colonies onto a standard steel MALDI target plate, followed by an automated acquisition of “proteotypic” fingerprint and subsequent bioinformatics pattern profiling, an identification of unknown samples is literally done in seconds.

The easy to use, robust benchtop MALDI-TOF MS fits in every lab environment and provides faster and highly reliable time-to-result, along with low consumable costs. Additional, easy to learn software components allow individual processing of raw data and – if needed – simple amendments of the included reference library.

BIOTECON Diagnostics is a leading company for rapid microbiological testing methods in food and beverage industries. We develop, manufacture, and distribute molecular diagnostic screening/identification tests, automation workflows and now tailor made MALDI-TOF MS solutions - including instrumentation and software.

Fast: 96 samples are analyzed in less than 20 minutes

Accurate: Reliable, secure and meaningful identification results

Economic: Low consumable costs

Simple: Easy to handle hard- and software

Robust: Pioneering and leading MALDI-TOF MS manufacturer

Approved: Established customer base - round about 2,500 deployed systems

D MASS Database - reference library for analysis of dairy products
Workflow

Pick Colony  
< 10 sec / sample

Prep Sample  
< 10 sec / sample

Process Data  
max. 10 min

Classification

Total workflow for 96 samples in less than 30 min

Key aspects and features:

- microflex LT/SH benchtop MALDI device
- Very fast (2 samples in < 5 min, 96 samples in < 30 min)
- Easy to handle hardware and software
- Identifies more than 2500 different species
- Reference libraries easy to extend
- Low consumable costs
- Convenient protocols

Consumables and additional components:

- Bacterial test standard (Bruker BTS)
- Ready to go HCCA Matrix (sample preparation)
- Reusable, barcoded MALDI steel targets
- Disposable MALDI targets (96 well format including adapter)

Sample preparation and automation possibilities:

- MALDI sample guiding system (optically guided sample deposition)
- Automated MALDI sample preparation systems (robotics and liquid handling)

In summary, the modern MALDI benchtop system brings in speed, accuracy and robustness. Consumable costs as well as your daily work load will be reduced significantly. Please ask for demo material or additional information.