



AXIMA ASSURANCE™

High Performance Mass Detection

Linear MALDI-TOF mass spectrometry for reliable mass information.

- An affordable, robust option for all laboratories requiring routine manual or automated analysis of a wide variety of sample classes.
- High sensitivity system using a variable repetition rate 50 Hz N₂ laser and a variety of target formats to meet all sample throughput requirements.



SHIMADZU  BIOTECH
bringing analysis to life

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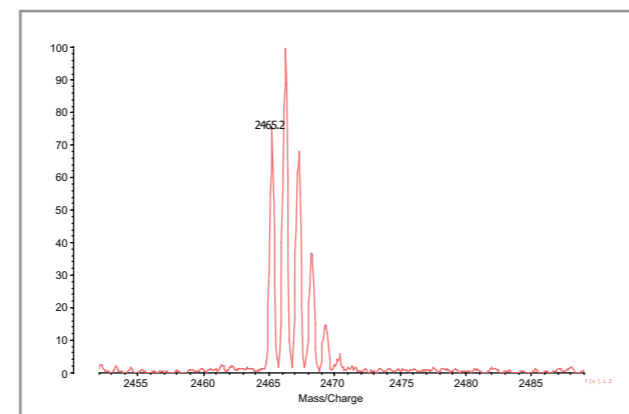
Axima Assurance - Flexibility and Quality

The Axima Assurance™ is designed with the general analytical and life science laboratory in mind. Incorporating a variable repetition rate 50Hz N₂ laser, the system provides high quality rapid MALDI mass spectra and an array of software tools for data processing and reporting.

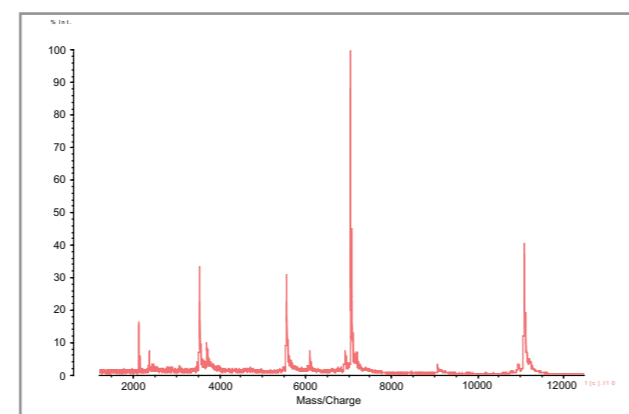
Positive and negative ion modes are included as standard, allowing greater flexibility and extending the compound categories that may be analysed. The system also incorporates a patented beam blower to optionally remove unwanted low mass ions and prevent detector saturation.

High sensitivity is achieved using near-axis laser irradiation and advanced ion optics for enhanced ion transmission. Pulsed extraction of ions from the MALDI source improves resolution and enhanced calibration algorithms with easy to use software provide more accurate data.

Unparalleled flexibility is achieved by a variety of sample target formats including standard microtitre plate format 96 or 384 well targets. Fleximass™ microscope slides (plain or 48 well targets) and a wide variety of adaptors for unconventional sample layouts are also available. The standard sample target formats are fully compatible with common laboratory robots, including the Xcise™ and CHIP™.



ACTH 18-39 demonstrating linear resolution of > 6000 FWHM



Typical oligonucleotide spectrum

Axima Assurance - Software solutions

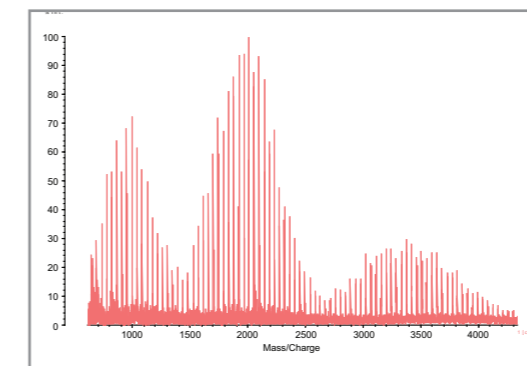
Intuitive software incorporating data dependent workflows for achieving the maximum result with minimum user input, ideal for novice and expert users alike.

The Axima Assurance™ is controlled by the Launchpad™ suite of software, common to all Axima mass spectrometers, permitting manual or fully automated operation, facilitating the seamless analysis of as few or as many samples as required. Intelligent optimization of acquisition conditions may be employed permitting auto-tuning for specific samples.

Ideally suited for high throughput QA/QC application areas, for example

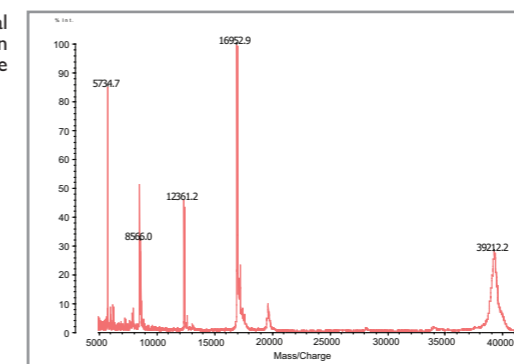
- Oligonucleotides/primers
- Synthetic peptides/proteins
- Polymer analysis
- Small molecules

Application-centric data processing software packages are available to provide solutions to many commonly asked questions.



Synthetic oligonucleotide mixture

Typical protein mixture



Synthetic Polymers

Polymers and copolymers can be characterised using our unique polymer software, PolymerAnalysis™, providing useful structural information and statistics in a text report format.

Oligonucleotides

OligoAnalysis™ offers fully automated QC analysis of large numbers of oligonucleotides or peptides, complete with a report indicating the presence or absence of the target compound, an estimate of the purity and occurrence of known contaminants, adducts or truncated/extended analogues.

Biomarker Discovery – Tissue imaging section

This exciting area encompassing clinical sample screening and tissue imaging/profiling is comprehensively addressed using automated acquisition methods and refined data processing. Protein/peptide biomarkers, drugs and their metabolites can be rapidly screened directly from tissue sections and their location mapped and visualized using integrated software tools. Complete integration with the CHIP™ allows fully automated wizard-driven tissue imaging experiments. Data can also easily be exported to 3rd party processing software, including BioMap and Non Linear Dynamics PG600.

All data can also be viewed in alternative packages to allow comparative experiments using a number of standard data formats including ASCII, m/zXML and m/zData.

System support

All Axima systems can be fully supported throughout their lifetime using sophisticated web based service diagnostics and real time remote monitoring. Highly trained specialist local service support engineers are available to install and maintain Axima mass spectrometers. A wide range of service contracts are available, catering for all budgets and requirements, including IQ/OQ environments and high throughput QA laboratories.

Full training courses are offered by MALDI experts at our regional corporate training centers or at the customer site and may be tailored for specific requirements and applications.