



Agilent MassHunter Workstation Software

The **fastest,**
easiest way to
transform MS data
into **answers**

Agilent MassHunter Workstation software was designed to make your MS analyses faster, easier, and more productive. In addition to data acquisition, and instrument control for your Agilent LC/MS, GC/MS, and ICP-MS instruments, the software incorporates advanced data mining and processing tools that let you rapidly and accurately extract all available information from the compounds in your samples—not just peaks and data points, but answers.

A single, consistent user experience across all your Agilent MS platforms

One easy-to-learn interface handles your basic qualitative and quantitative analysis tasks. Because the software is the same

from one Agilent MS platform to the next, you'll reduce training time, minimize operator errors—and significantly increase your lab's productivity.

Comprehensive portfolio of software for LC/MS, GC/MS, and ICP-MS workflows

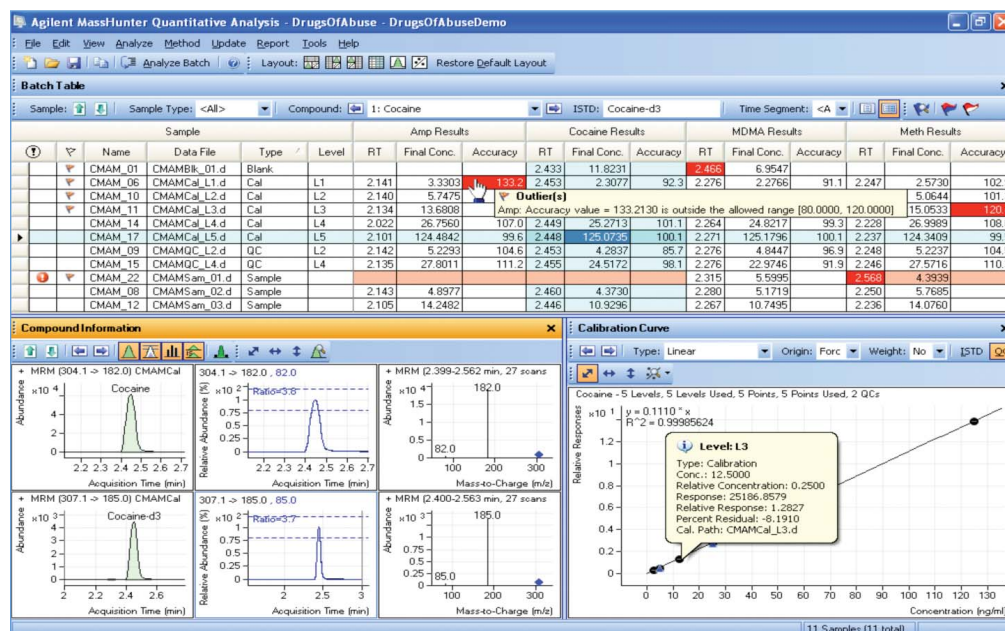
MassHunter Workstation provides dedicated software modules for quantitation, compound confirmation, target compound screening, degradant and unknown identification, characterization of biomolecules, and protein and metabolite identification. It also integrates seamlessly with Agilent Mass Profiler Professional software for advanced differential analyses in metabolomics, proteomics, and chemical analysis.

Our measure is your success.



Advanced quantitation capabilities shorten your path to results

- Unprecedented productivity with time-saving features such as batch-at-a-glance data review, dynamically linked results, and customizable views
- Outlier flagging and a parameter-less integrator with built-in peak validation capability let you focus exclusively on problem peaks and minimize manual reintegration
- Simple, quick creation of quantitation methods with tools such as Concentration Setup Assistant
- Comprehensive features to support quantitation in compliance with 21 CFR Part 11 guidelines



Efficient review of large, multi-compound batches. Flexible spreadsheet organization of the data is complemented by color-coded outlier detection indicating results that require closer inspection.

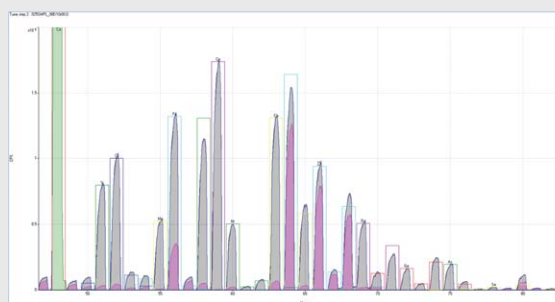
• Click on a result and all associated peaks, spectra, and calibration data are immediately displayed.

• Adjust peak integration, and results are updated.

• Remove a calibration point, and the curve is updated.

Agilent ICP-MS MassHunter Workstation provides comprehensive quantitative analysis capability

MassHunter software for ICP-MS includes complete instrument control, acquisition, and data analysis modules with real-time batch table and calibration overviews, LabQC display, and automatic flagging of outliers. Isotope ratio, isotope dilution, and time resolved analyses are also standard features, with optional modules providing advanced features such as in-run Intelligent QC, comprehensive chromatographic data analysis, and integration with Agilent's OpenLab Enterprise Content Manager.



Powerful qualitative and semi-quantitative ICP-MS data analysis. ICP-MS MassHunter Workstation provides comprehensive spectral processing tools for evaluating, comparing, and reporting information on uncalibrated analytes.

Powerful qualitative tools extract all the information from your samples

Advanced data mining and processing tools, such as Molecular Feature Extractor (MFE) and integrated deconvolution algorithms, let you rapidly and accurately find all detectable compounds in your samples and easily confirm targets or identify unknowns. MassHunter's unique, compound-centric data organization and navigation lets you easily compare complex MS data files, and review results quickly and efficiently.

Fast, integrated library searches

To enhance your productivity and more easily identify targeted and untargeted analytes, MassHunter Workstation software can automatically search significant compounds against METLIN, the Fiehn Library, NIST, MRT, Spectrum Mill, and many other public and private databases. Best-in-class algorithms, optimized for your MS platform, ensure the highest accuracy.

Significance Analysis
 Find Differential Expression (Step 5 of 6)
 Selected Test: 1 Test unpaired
 p-value computation: Asymptotic
 Multiple Testing Correction: Benjamini-Hochberg

	P	P < 0.05	P < 0.002	P < 0.005	P < 0.001
PC #1	1955	4762	3081	2524	1320
PC #1.1	6661	4528	2023	2012	1120
PC #1.2	2991	1221	960	836	652
PC #1.3	125	102	288	245	288
PC #1.4	411	219	100	120	120
PC #1.5	228	61	20	6	0

Volcano Plot: log2 Fold change (x-axis), -log10(p-value) (y-axis). Points are colored by significance level: red (P < 0.001), green (P < 0.005), blue (P < 0.002), grey (P < 0.05).

Mass Profiler Professional software helps you elucidate differences in your GC/MS and LC/MS experiments

Agilent's Mass Profiler Professional software includes multivariate analytical tools, such as principal component analysis, ANOVA, clustering algorithms, and class prediction, to efficiently turn large sample sets into meaningful information.

Compound-centric data navigation and selection

Detailed molecular formula generation and accurate mass database search results

Method Editor and Explorer

Overlaid compound chromatograms for each compound

List of compounds with best molecular formulas and accurate mass database search hits

Mass peak list with identified ion species for each compound

Compound mass spectrum with theoretical isotope pattern overlaid for generated formulas

High-productivity qualitative analysis. In this example, MassHunter searches against a 1600-pesticide accurate mass database and generates molecular formulas for non-identified compounds in less than one minute.

Clear, professional presentation of critical information facilitates collaboration and better-informed decision making

Add tables and graphics using tool buttons

Drag and drop columns from XML results

Use conditional formatting for outlier flagging

Print preview

Use Excel number formatting

Format headers and footers using Excel

The screenshot displays the Microsoft Excel interface with a custom macro add-in for reporting. It shows a 'Quant Sample Report (ISTD)' and an 'Outlier Report - Sample Amount Out of Calibration Range'. The interface includes a menu for adding tables and graphics, a callout for dragging columns from XML results, a callout for using conditional formatting for outlier flagging, a callout for using Excel number formatting, and a callout for formatting headers and footers using Excel. The reports include chromatograms, tables of results, and summary statistics.

For maximum robustness and flexibility, MassHunter stores all results in XML format and uses Microsoft® Excel and a custom macro add-in for reporting. A wide range of application-specific templates and customized reports is available in this familiar Excel environment—including custom calculations to meet all your application needs.

Agilent software gets you to the answers faster

MassHunter Workstation is part of Agilent's comprehensive, integrated software portfolio. From instrument control to enterprise content management, we recognize the critical role software plays in your lab's operation, and we're working towards a single goal: To help you reduce the time, effort, and cost to get from raw data to final insight.

For more information

Learn more:

www.agilent.com/chem/masshunter

Find an Agilent customer center in your country:

www.agilent.com/chem/contactus

U.S. and Canada

1-800-227-9770

agilent_inquiries@agilent.com

Europe

info_agilent@agilent.com

Asia Pacific

inquiry_lsca@agilent.com

Research use only. Information, descriptions and specifications in this publication are subject to change without notice. Agilent Technologies shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

© Agilent Technologies, Inc. 2010
Published in USA January 12, 2010
5990-4845EN



Agilent Technologies