# EXTEND YOUR METABOLOMICS
WITH AGILENT'S VISTAFLUX SOFTWARE

VistaFlux Software for High-Performance Qualitative Flux Analysis

Metabolic flux analysis offers insights into metabolic changes and can expose unexpected shunts between metabolites in well-studied pathways. Agilent's integrated MassHunter VistaFlux solution is designed to meet the challenges of qualitative metabolic flux analysis.

Qualitative flux analysis uses stable-label isotope tracing and targets specific pathways of interest by acquiring data on an Agilent TOF-based LC/MS. Mining the data for pathway-targeted metabolites, stable isotope label incorporation is used to follow metabolic fluxes.

VistaFlux offers cutting-edge extraction of TOF-based mass spectrometry isotopologue data and supports the common heavy isotopes (^{13}C, ^{15}N, and ^{2}H). The flux results are mapped onto biochemical pathways with easy to interpret visualizations. In addition to static images, VistaFlux offers animated pathway movies to easily interpret time-course studies.
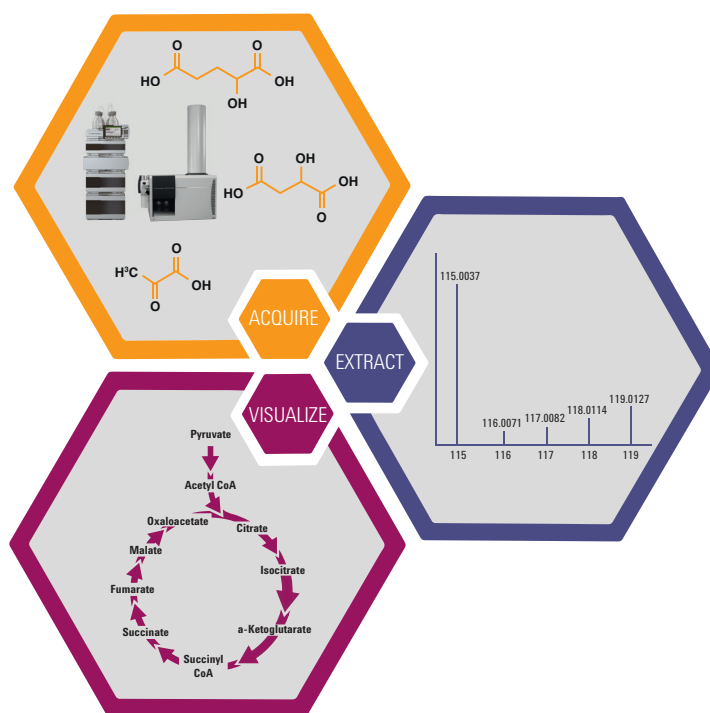
MassHunter VistaFlux

VistaFlux is a comprehensive workflow for qualitative flux analysis and includes software modules for easy creation of targeted metabolite lists from pathways, sophisticated extraction of isotopologues, and flexible visualization on pathways. VistaFlux easily finds and quantifies targeted metabolites from stable isotope-labeled data and displays results using advanced pathway visualization software. In addition, VistaFlux exports figures for publication and presentations and generates reports, making the complete workflow easy and fast for Agilent LC/TOF and Q-TOF systems.

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MassHunter Profinder

Profinder is a fast, batch-processing feature extraction software for differential analysis that supports data from Agilent GC/MSD, GC/Q-TOF, LC/TOF, and LC/Q-TOF instruments. Profinder finds more compounds using Agilent's unique recursive untargeted feature-finding algorithm, and supports LC/MS qualitative flux analysis using a cutting-edge extraction algorithm for targeted stable-label isotope data mining (^{13}C, ^{15}N, and ^{2}H) that includes background correction and isotopologue incorporation display. Integrated batch review tools include multiple chromatogram overlay, color by sample group, and manual re-integration.

Agilent MassHunter Profinder summarizes batch isotopologue results
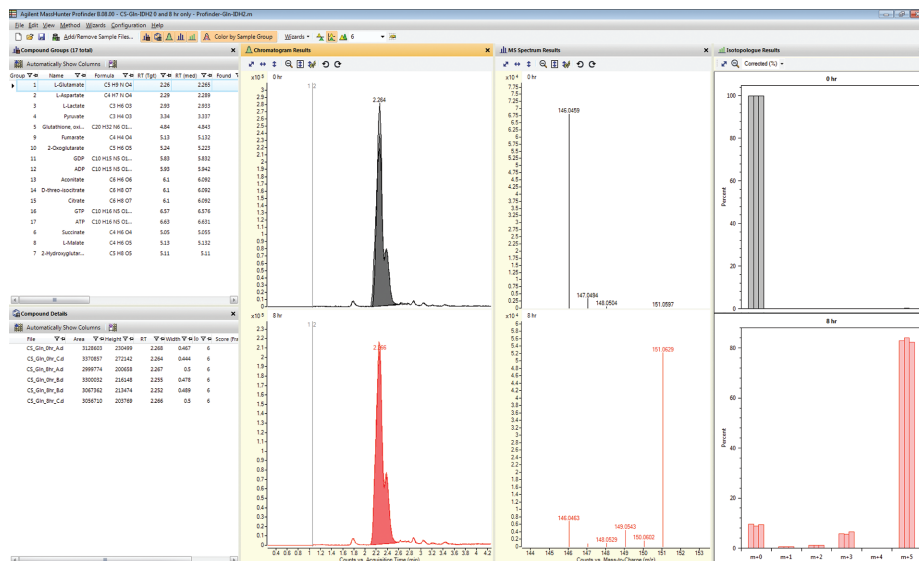
TOF/Q-TOF

TOF technology is an excellent choice for discovery metabolomics because it provides high resolution, high mass accuracy, and outstanding isotope ratio fidelity - and maintains this performance even as acquisition rate increases. Isotope ratio fidelity is critical in qualitative flux analysis. Agilent provides state-of-art TOF and Q-TOF instrumentation to meet the needs of metabolomics researchers. Agilent offers a range of TOF solutions to meet your needs, such as the 6230B TOF LC/MS system and the 6545 Accurate-Mass Q-TOF LC/MS system.

Agilent 1290 Infinity Series II UHPLC
with 6545 Accurate-Mass Q-TOF LC/MS System

Learn more
www.agilent.com/chem/flux

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