

Do you face these problems when analyzing proteins?

- Lack of reproducibility
- Imprecise separation techniques
- Incomplete protein sequence coverage
- Lack of trained laboratory personnel

Gaining insights into protein complexes or proteomic samples requires significant reductions of sample complexity and dynamic range. 2D gel electrophoresis is not capable of meeting this challenge. In addition to their substantial manual labor requirement, 2D gels lack the dynamic range, broad protein specificity and day to day reproducibility required for robust analysis of complex protein mixtures. Waters now offers an automated, reproducible alternative to this electrophoretic technique with the introduction of the Alliance® Bioseparations System.

Alliance Systems. Reproducibility that can't be copied.

An extension of the highly-successful family of Alliance® brand systems, the Alliance Bioseparations System is a high-pressure, high-resolution HPLC system for the fractionation and analysis of complex biomolecule mixtures. The heart of the Alliance Bioseparations System is the new Waters 2796 Bioseparations Module. Designed for robust operation under the harsh salt and pH conditions typical of bioseparations, it features a titanium and PEEK flowpath. The system's high pressure capability also makes it ideal for protein purification, peptide mapping and nucleic acid analysis. The Alliance System automates column switching, flow diversion and fraction management to support comprehensive multidimensional separation methods. In addition to the Waters 2796, the Alliance 2D Bioseparations System includes the Waters 1525µ Binary HPLC pump for managing second dimension gradient separations and high-resolution BioSuite™ and Symmetry 300™ columns. MassLynx™ software with the FractionLynx™ Application Manager provides easy-to-program system control and fraction tracking. You can configure the Alliance Bioseparations System to collect fractions into collection tubes or microtiter plates. Or you can interface directly to a Waters Micromass® TOF mass spectrometer.



MassLynx™ software makes answers easier to find.

MassLynx 4.0 software is the market-leading, high-performance data platform of the Alliance Bioseparations System. It enables single workstation control for single or multidimensional chromatographic methods, mass spectral acquisition and real-time monitoring of solvent composition, pH, conductivity, valve position, system pressure and column temperature. FractionLynx™ and OpenLynx™, the easy-to-use and learn Applications Managers that run with MassLynx, effortlessly track samples, fractions and all associated data and present the information in customizable and easy-to-understand formats. These combined capabilities convert your samples not only into data but into useful knowledge as well.

Dual wavelength or PDA detection offers the sensitivity required to simultaneously quantitate major and minor components.

On-line pH and conductivity monitors enable you to optimize complex separations using real-time buffer composition information.

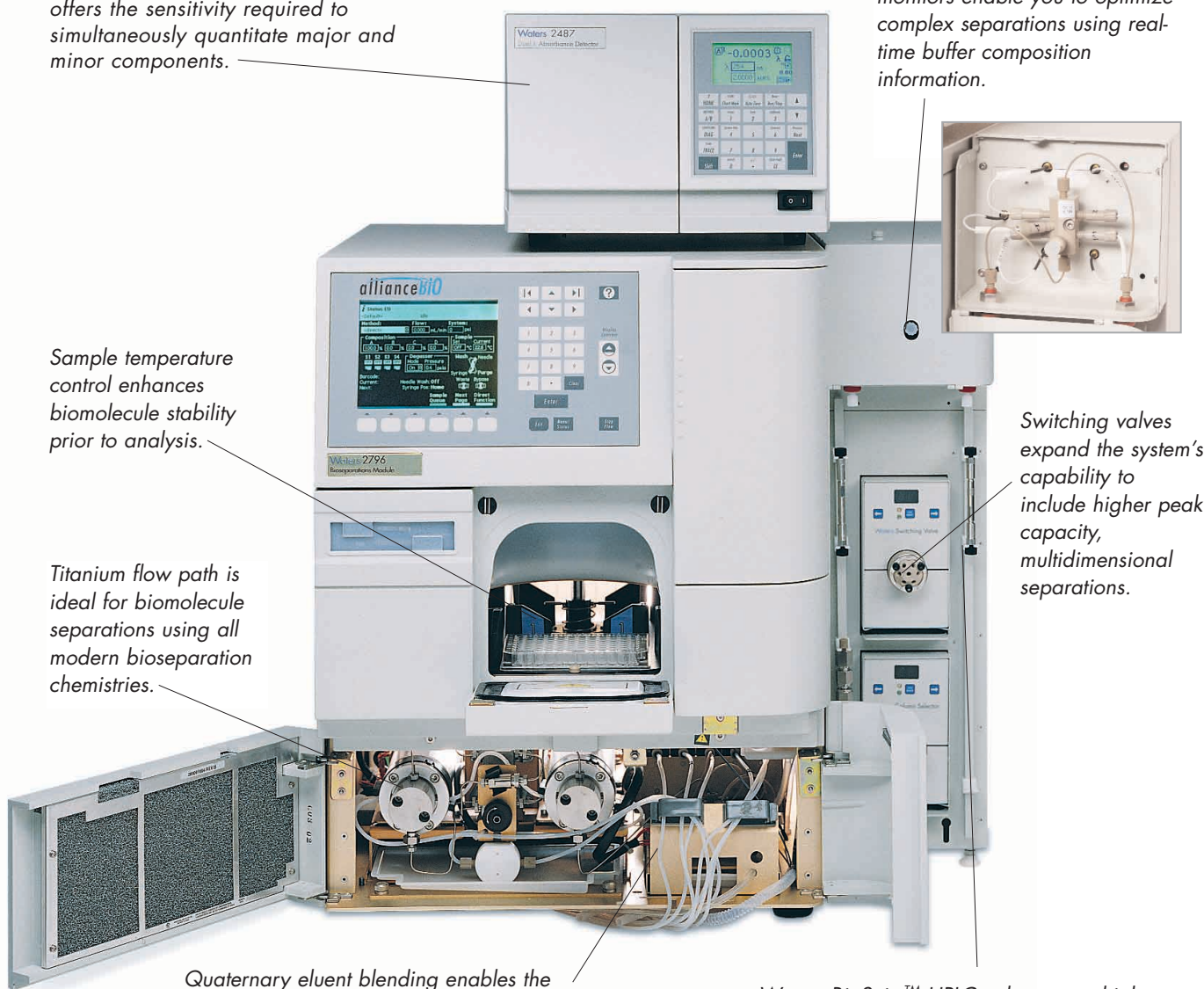
Sample temperature control enhances biomolecule stability prior to analysis.

Titanium flow path is ideal for biomolecule separations using all modern bioseparation chemistries.

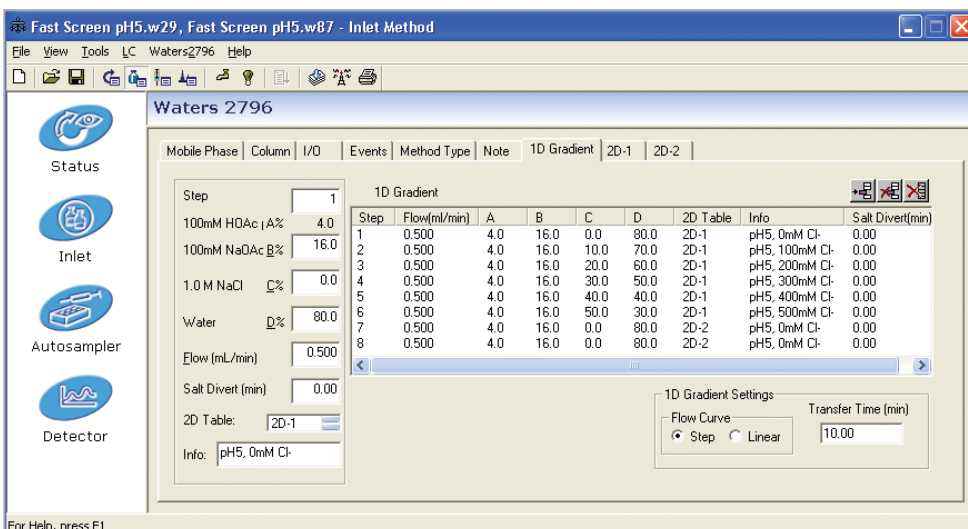
Switching valves expand the system's capability to include higher peak capacity, multidimensional separations.

Quaternary eluent blending enables the automatic formulation of buffers from simple stock solutions using Waters AutoBlend™ methods.

Waters BioSuite™ HPLC columns are high-performance chemistries developed specifically for the isolation, analysis and characterization of proteins, peptides and other biomolecules.

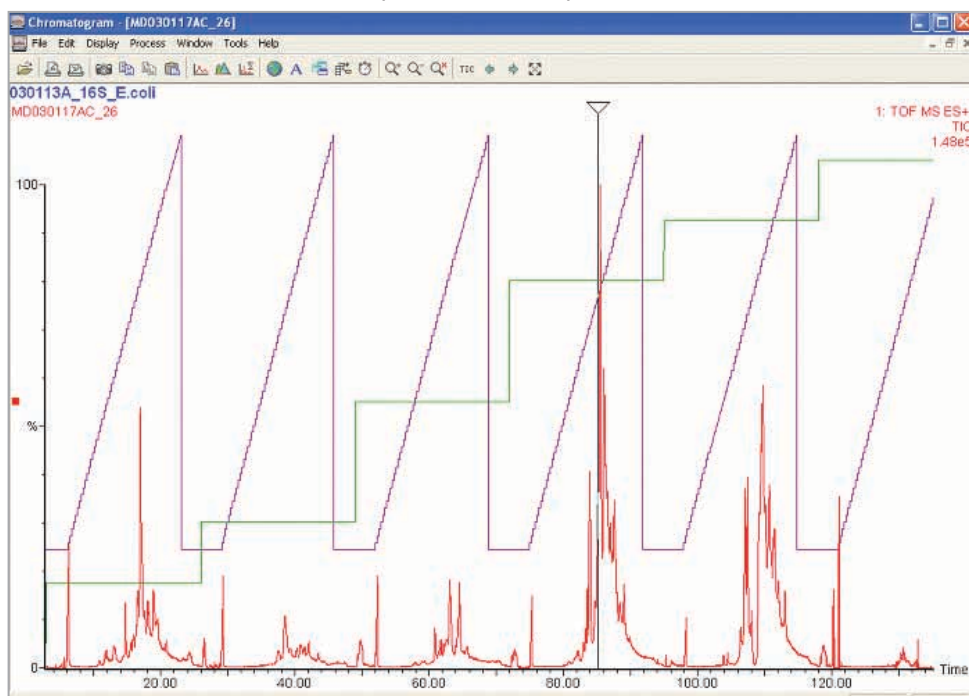


MassLynx software makes programming single and multidimensional chromatographic methods easy.



This MassLynx™ software screen illustrates how the simple user interface controls an eight-step multidimensional AutoBlend ion exchange/reversed phase separation. You can select one of up to ten custom 2nd dimension gradients for each step while the software automates all required valves, including salt diversion steps needed for online mass analysis.

2 - Dimensional HPLC (IEX/RP) analysis of an E.coli cytosolic fraction.



This separation of a typical proteomic sample demonstrates the ability of the Alliance 2D Bioseparations System to resolve and characterize complicated cellular fractions.

- 1st dimension IEX step gradient
- 2nd dimension reversed phase gradient
- TIC trace

System: Waters Alliance Bioseparations System coupled to a Micromass® LCT TOF-MS.

Sales Offices:

AUSTRIA AND EXPORT (CENTRAL EUROPE, CIS, MIDDLE EAST, INDIA AND INDIA SUBCONTINENT) 43 1 8771807

AUSTRALIA 2 9933 1777

BELGIUM AND LUXEMBOURG
02 726 1000

BRAZIL 55 11 5543 7788

CANADA 800 252 4752 X2205

CIS 095 931 9193

CZECH REPUBLIC 2 617 11384

DENMARK 46 59 8080

FINLAND 09 506 4140

FRANCE 33 1 30 48 72 00

GERMANY 06196 40 06 00

HONG KONG 29 64 1800

HUNGARY 061 350 5086

INDIA 80 837 1900

IRELAND 1 4481500

ITALY 02 274211

JAPAN 3 3471 7191

KOREA 82 2 3284 1300

MALAYSIA 3 7804 8600

MEXICO 5255 5524 7636

THE NETHERLANDS 76 508 7200

NORWAY 6 384 6050

PEOPLES REPUBLIC OF CHINA –
BEIJING 86 10 8451 8918

POLAND 022 833 4400

PUERTO RICO 787 747 8445

SINGAPORE 65 6278 7997

SPAIN 93 600 9300

SWEDEN 46 8 555 11 500

SWITZERLAND 62 889 2030

TAIWAN 2 2543 1898

UK 44 208 238 6100

U.S.A. AND ALL OTHER COUNTRIES:

WATERS CORPORATION
34 Maple St.
Milford, MA 01757 U.S.A.
T: 508 478 2000
F: 508 872 1990
www.waters.com



BioSuite™ HPLC Columns. Designed specifically for bioseparations, Waters' line of BioSuite HPLC columns deliver the resolution and recovery of proteins and peptides proteomic scientists need. Available in ion-exchange, size exclusion, hydrophobic interaction and reversed-phase modes, BioSuite columns are available in analytical as well as "lab scale" preparative dimensions. BioSuite reversed-phase columns include either a C18 or phenyl functional group coupled to a porous polymeric matrix and complement Waters' line of Symmetry®, Symmetry300™, Atlantis® dC18 and XTerra® reversed-phase columns.

World-Renowned Support and Services

Waters Connections® provides the solutions you need to maintain maximum uptime across your Waters systems.

- Analytical Instrumentation and Software Services include Total Assurance Plans that extend and enhance the original warranty you receive when you buy a Waters product. These plans minimize the level of insurance investment and deliver the value you need to avoid costly and time-consuming system downtime.
- Connections® Compliance Services provide you with timely and cost-efficient solutions for your regulatory compliance challenges. You can use our Compliance Services to effectively train and certify personnel in equipment and regulatory requirements for cGMP/GLP compliance, significantly reducing operating costs.
- Connections University is the center of our Educational Services, providing extensive HPLC and LC/MS training and education at your site, at our corporate headquarters or at our local offices around the world.

Representatives of our global Customer Assurance Organization, trained and certified in all our products and current in HPLC and LC/MS applications, are available in person, on the phone, via FAX or at www.waters.com to answer questions and provide you with around-the-clock support and information services.

Waters

Opt-In! My Profile www.waters.com

