

# Purify Your Samples with Maximum Efficiency

Agilent InfinityLab LC Purification Solutions



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For isolation and purification of your samples with highest purity and recovery, Agilent InfinityLab LC Purification Solutions offer high-performance instrumentation, columns, software, and services for analytical- to preparative-scale workflows. A comprehensive and scalable portfolio based on a single platform gives you the choice to tailor a system to meet your laboratory's current and future needs.

## Efficient purification solutions from analytical to preparative scale

Agilent offers high-efficiency purification solutions for workflows ranging from analytical-scale compound isolation to preparative-scale purification of multiple grams.

A completely new comprehensive and scalable portfolio of state-of-the-art instrumentation is based on a single platform and backed by over 40 years of technology leadership in LC purification.

Agilent purification solutions are matched perfectly with InfinityLab columns and supplies. Control through OpenLab CDS ChemStation software and support by CrossLab instrument and enterprise service plans maximize the efficiency of your purification workflows.

Tailor a system to meet your requirements and make a real difference to your laboratory's operational efficiency.

## Highest operational efficiency for your purification laboratory

At Agilent, we are passionate about helping you to solve your purification challenges. By focusing on the three facets of efficiency, our solutions guarantee your success.

- **Purification efficiency** – Achieve maximum purity and recovery with any InfinityLab LC Purification Solution. Don't miss any compounds through a wide range of detectors, including mass-based fraction-triggering.
- **Instrument efficiency** – Purify milligrams to multiple grams of material – with no losses through our scalable flow-rate and capacity offering. Improve your day-to-day operation with the clean and tidy setup.
- **Laboratory efficiency** – Leverage the small footprint and upgrade possibilities according to growing business demands. Ensure secure operations and protect your laboratory all the time through built-in safety features.



### 1220/1260/1290 Infinity II Analytical-Scale LC Purification Systems

Experience the power of analytical compound isolation

Isolate your compounds of interest through high-performance separation and low-dispersion fraction collection. Choose the bio-inert option for purification of your proteins or sensitive samples.



### 1260 Infinity II Preparative LC Systems

Benefit from efficient purification – every day

Achieve highest purity and recovery with the most affordable fraction collector. Get highest flexibility in fraction size while maintaining high-precision recovery.



### 1290 Infinity II Preparative LC Systems

Purify with the benchmark in efficiency

Aspire to maximum efficiency in your purification workflows. Get maximum flexibility to solve all your purification challenges with highest purity, recovery, and speed.

	Analytical		Semipreparative		Preparative	
Productivity Range	Micrograms	Milligrams			Grams	
Agilent 1220/1260/1290 Infinity II Analytical-Scale LC Purification Systems	0.01 – 10 mL/min					
Agilent 1260 Infinity II Preparative LC Systems		1 – 50 mL/min				
Agilent 1290 Infinity II Preparative LC Systems		1 – 50 mL/min			4 – 200 mL/min	
Column Inner Diameter	4.6 mm	10 mm (½ inch)	20–25 mm (1 inch)	30 mm	50 mm (2 inch)	
Typical Flow Rate (mL/min)	1	4.7	20–25	42	118	

Flow range extensions made possible by exchangeable pump heads

# The Safe Investment for Highest Recovery

Buy an InfinityLab LC Purification Solution from Agilent and you can be confident that you have made the safest possible investment. Seamless integration of instrumentation, column technology, and software ensure highest efficiency with utmost productivity.

## Future-proof investment

InfinityLab LC Purification Solutions are based on a common platform. Choose from preconfigured systems, or opt for a tailor-made solution to meet your specific purification requirements for discovery, research, or small-scale production. Seamless upgrade paths enable you to increase capacity to meet changing demands.

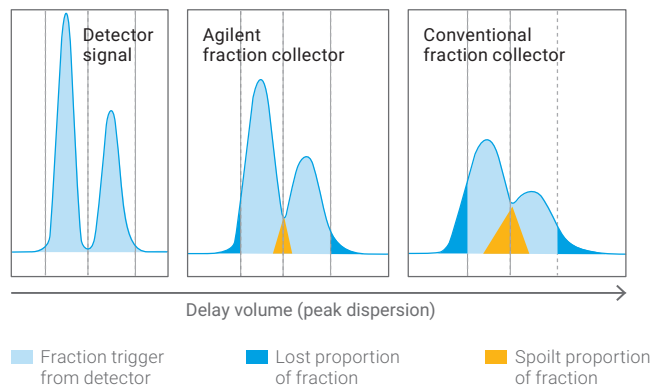
## Data confidence

Agilent delay-sensor technology determines delay volumes automatically and ensures that fractions are collected just-in-time – without the need to collect extra volumes.

Any combination of time, peak, and mass-based fraction collection can be triggered by the detectors of your choice. Intelligent real-time data processing for instantaneous and precise fraction collection is guaranteed through the control area network (CAN).

## Sample recovery

With InfinityLab LC Purification Solutions, your samples are 100-percent safe. Recovery collectors ensure that your valuable samples are not diverted to waste – everything goes to safe locations and can be recovered easily. Add a recovery collector to your purification system to protect your samples and increase your throughput, capacity, and productivity.



Agilent fraction collectors are designed for lowest delay volumes to avoid peak dispersion and carryover between fractions, assuring highest purity and recovery for your fractions.

# 40 Years of Technology Innovations

Ten of thousands of laboratories worldwide rely on Agilent LC purification solutions to deliver unmatched performance, productivity, and reliability for the isolation and purification of high-value compounds such as active pharmaceutical ingredients, peptides, proteins, and fine chemicals.

## Reliability for highest uptime

When you partner with Agilent, you can rest assured you are investing in a relationship with proven and long-standing expertise in purification. We guarantee that every system is designed and manufactured with parts of the highest quality for highest uptime and minimum maintenance. Sophisticated built-in diagnostics and maintenance tools ensure reliable and secure operation. CAN networking provides modular intelligence for maximum flexibility.



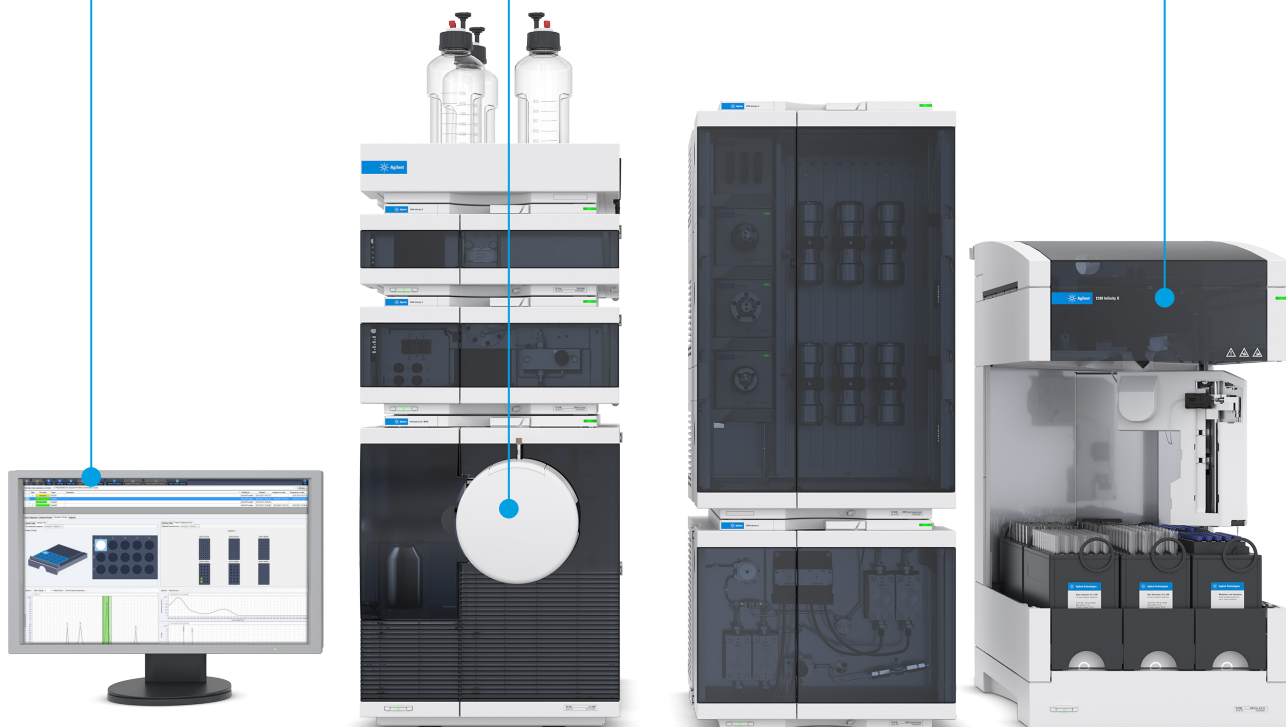
## The Benchmark in Purification

The 1290 Infinity II Preparative LC System embodies the next generation of instrumentation for preparative LC, delivering the maximum in purification, instrument, and laboratory efficiency. Set the benchmark in your laboratory and boost your daily throughput.

Automated calculation of focused gradient profiles for each target compound helps you to achieve highest purity and recovery.

Our wide range of detectors for fraction triggering – including mass-based detection – ensure that you achieve maximum purity and recovery.

The 1290 Infinity II Preparative Open-Bed Sampler/Collector optimizes bench space. Benefit from the built-in fraction delay calibration of all InfinityLab fraction collectors.



## Maximum purification efficiency

The 1290 Infinity II Preparative LC System combines UV and mass-based peak identification for optimum fraction collection.

- Power range of 600 bar at 50 mL/min and 420 bar at 200 mL/min for more resolution
- Lowest delay volume minimizes peak dispersion and carryover for highest recovery and purity
- Mass-based fraction collection for increased purified quantity per unit time and reduced need for reanalysis.

## Maximum instrument efficiency

The Agilent 1290 Infinity II Preparative Open-Bed Sampler/Collector combines fully automated handling of vials and microtiter plates in a single module.

- Capacity to inject up to 864 samples or collect up to 432 fractions, or any combination, for full flexibility
- Flow rates up to 200 mL/min support 50 mm id columns, reducing number of required injections for more purified compound per unit time
- Reduced number of collected fractions necessary for optimized capacity utilization and instrument uptime

## Maximum laboratory efficiency

By adding Agilent Automated Purification software to OpenLab CDS ChemStation you open the door to full workflow automation.

- Highest fraction density per unit bench space
- Scalable sample fraction capacity based on your needs up to a maximum of 1296 fractions
- Easy-to-change pump heads allow you to expand the flow range up to 200 mL/min



For applications using mass-selective fraction collection, the MS Flow Modulator delivers a controlled and reproducible split ratio.



The 1290 Infinity II Preparative Column Compartment offers highest flexibility for mounting and organization of your analytical and preparative LC column, valves, delay coils, and MS Flow Modulator – all within a single module. Use with any InfinityLab LC Purification Solution to increase your productivity significantly.

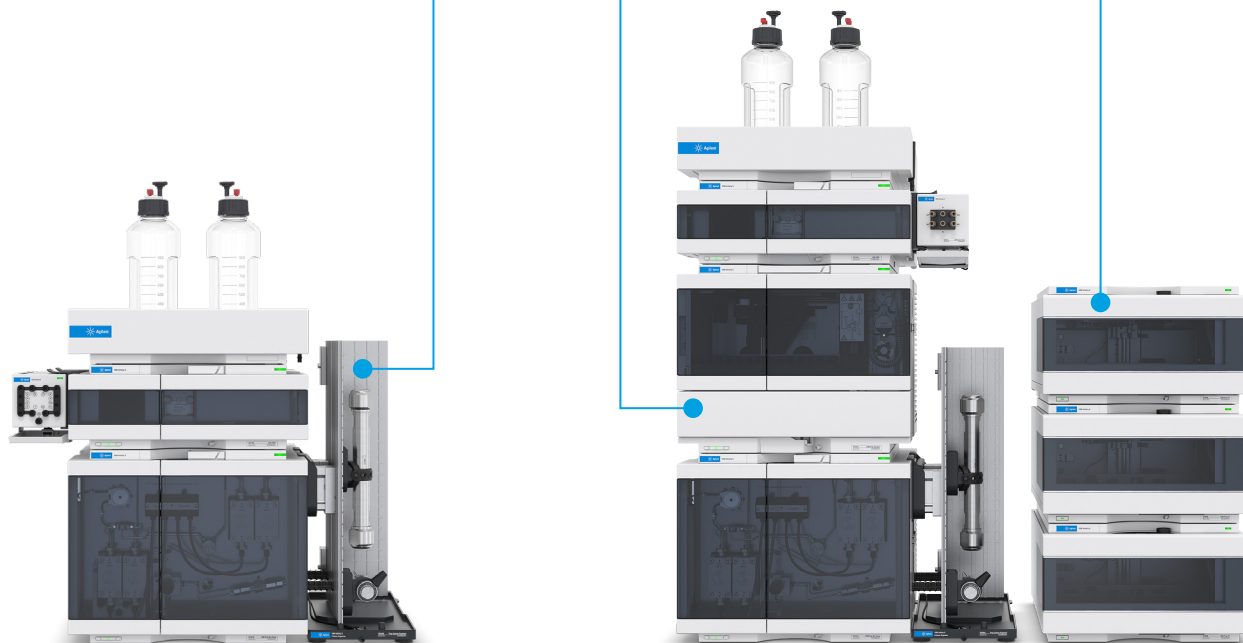
## Everyday Efficiency in Every Way

The Agilent 1260 Infinity II Preparative LC System is a dedicated solution with scalable capacity from a few samples to automated unattended purification of hundreds of samples. Move up to the next level of confidence in purification – every day in every way – at a price you can afford.

Compatible with any InfinityLab LC Purification Solution, the 1260 Infinity II Column Organizer provides for convenient mounting and management of a manual injection valve and your analytical and preparative LC column.

Injection of microliter to milliliter volumes of sample from vials for preparative-scale LC purification.

Smooth upgrade paths allow you to increase collection capacity based on demand.





## Everyday purification efficiency

The 1260 Infinity II Preparative LC System is a reliable system for your daily purification work. Seamless matching with our preparative LC column and advanced supplies guarantees robust purification.

- Automatic delay calibration and multiple detectors facilitate maximum recovery and purity
- Highest flexibility in fraction size while maintaining high-precision sample recovery
- Perfectly matched with columns and supplies – for guaranteed separation and detection performance

## Everyday instrument efficiency

The 1260 Infinity II Preparative LC System brings a higher level of flexibility to your laboratory. Scale up easily from analytical work to purification tasks with minimum training.

- Flow rates up to 50 mL/min for compatibility with columns up to 30 mm inner diameter
- Sample introduction through easy-to-use manual injector, or fully automated vial sampler with injection of up to 3.6 mL from up to 132 samples
- Four outside diameters of fraction tubes enable collection of up to 216 fractions per module



The 1260 Infinity II Preparative Valve-Based Fraction Collector forms a simple but solid foundation for your purification system. This module comprises one inlet port, 11 collection ports, and one waste port, facilitating easy compound isolation.

## Everyday laboratory efficiency

Achieve highest purity and recovery with the most-affordable fraction collector. Get highest flexibility in fraction size while maintaining high-precision recovery.


- Highest throughput within smallest footprint though optimized, single-stack configurations
- Expandable capacity up to 648 fractions within the same footprint
- Smooth upgrade paths protect your investment





## Tailor-Made Solutions – Purely for You

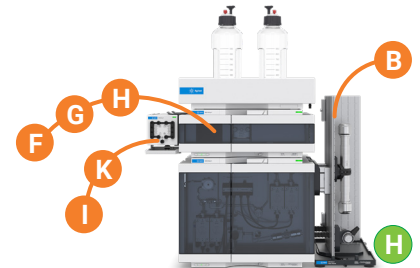
Choose from a wide range of solvent delivery modules, injectors, detectors, and fraction collectors to tailor a system that meets your needs. Increase your laboratory productivity with our automated purification software for automated transfer from analytical to preparative-scale purification workflows.

Find more details in the InfinityLab LC Purification Selection Guide (publication number 5991-9153EN).

 Exchange module as your needs change

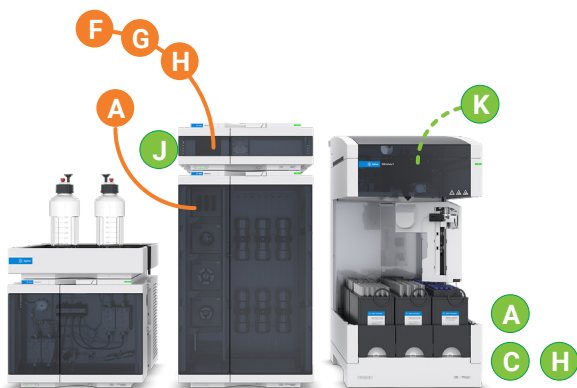
 Add module to boost system performance

 Add as standalone module to any system



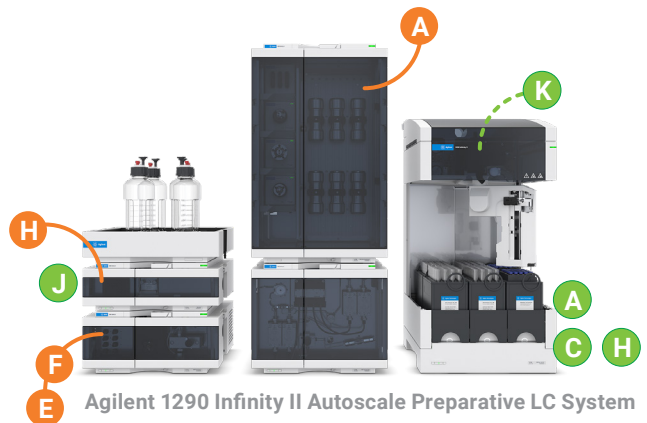
**Agilent 1260 Infinity II Manual Preparative LC System**

Get the affordable solution with binary gradient delivery and manual sample injection for milligram purification.



**Agilent 1290 Infinity II Preparative LC System**

Combine automated sample injection with the flexibility to access four analytical and six preparative columns.



**Agilent 1290 Infinity II Autoscale Preparative LC System**

Calculate focused gradients on-the-fly for each target compound to ensure highest purity of collected fractions.

### Modules



Agilent 1260 Infinity II Preparative Column Organizer



Agilent 1290 Infinity II Preparative Column Compartment



Agilent 1260 Infinity II Preparative Manual Injector



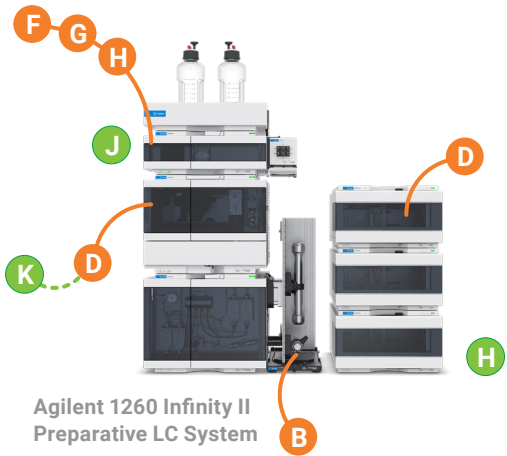
Agilent 1290 Infinity II Preparative Open-Bed Sampler / Collector



Agilent 1260 Infinity II Variable Wavelength Detector

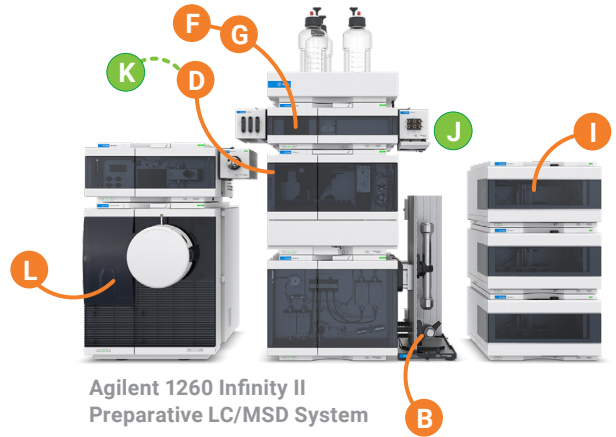


Agilent 1260 Infinity II Diode Array Detector WR



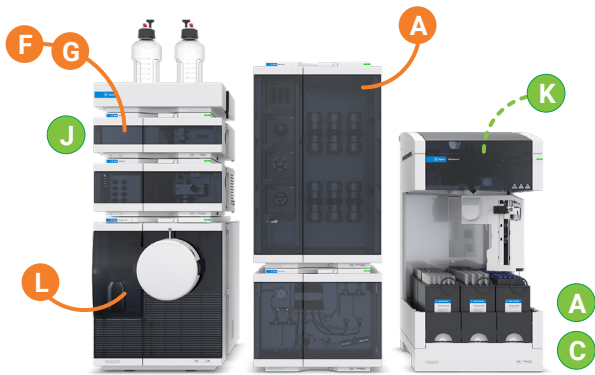
**Agilent 1260 Infinity II Preparative LC System**

Move up to the next level of automation and confidence in your daily purification work while keeping within your budget.



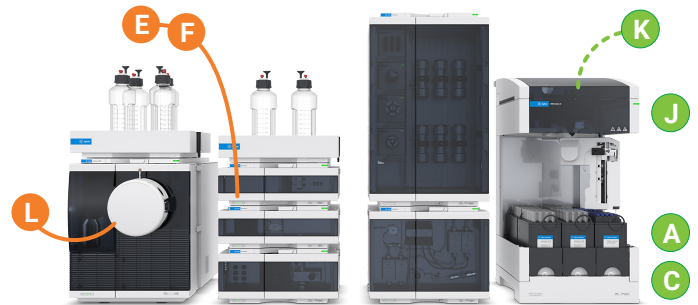
**Agilent 1260 Infinity II Preparative LC/MSD System**

Configure with UV and MS detectors, autosampler, and multiple fraction collectors to meet your needs for automation and throughput.



**Agilent 1290 Infinity II Preparative LC/MSD System**

Gain full application flexibility within optimized bench space plus accurate mass-selective fraction triggering.



**Agilent 1290 Infinity II Autoscale Preparative LC/MSD System**

Get the highest efficiency with the ultimate system for direct scale-up from method scouting to gram-level purification of compounds.



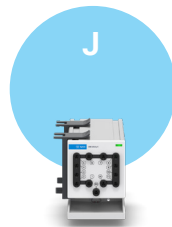
Agilent 1260 Infinity II Multiple Wavelength Detector



Agilent 1260 Infinity II Evaporative Light Scattering Detector



Agilent 1260 Infinity II Preparative Fraction Collector



Agilent 1260 Infinity II Preparative Valve-Based Fraction Collector



Agilent 1290 Infinity II Preparative Open-Bed Fraction Collector



Agilent LC/MSD XT System

## Predictable Method Scale-Up, Long Column Lifetime, and Improved Performance

Maximize the performance and reliability of your purification workflow by combining your InfinityLab LC Purification Solution with Agilent preparative columns and InfinityLab LC supplies. Regardless of your application, Agilent offers more solutions to solve your preparative LC challenges.

### Load & Lock columns for greater economy and flexibility

Agilent Load and Lock columns are sold in a range of diameters and lengths, and can be packed with any commercially available materials, offering cost-effective and versatile solutions for high-performance, high-throughput, and high-yield preparative-scale purification. Proprietary fluid and sample distribution plates enable 20 % higher sample loading while minimizing backpressure and peak broadening.

With just one mobile station, you can pack any number of 1, 2, and 3 inch id columns. The undocking feature allows you to deploy the packed columns anywhere in your facility.



## Prep LC columns for reliable scale-up of small-molecule applications

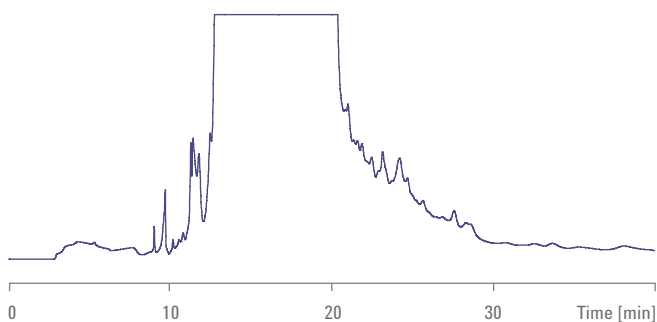
Agilent Prep LC columns provide exceptional loading and stability up to pH 10 and let you purify milligram to gram quantities of product. Prep LC columns are available in many formats to accommodate most of your preparative samples. Within the family, polar silica and nonpolar C18 phases are available. For rapid method development and easy scalability, sizes from 4.6 to 50 mm are available, as well as bulk media.



Agilent Prep LC columns are highly loadable, allowing you to purify milligram to gram quantities of product.

## PLRP-S columns for high stability under demanding conditions

Agilent PLRP-S columns give you additional options for optimizing capacity and resolution – two key parameters for maximizing purification throughput. The thermal and chemical stability of PLRP-S makes it ideal for purification workflows in which extreme conditions are used for sample preparation, compound elution, and column regeneration.



Purification of a phe-ile-val tripeptide sample using an Agilent PLRP-S column (100 Å, 10 µm). A single purification run achieved 95 % purity and 86 % yield.

## InfinityLab supplies for easier usability and higher purification efficiency

Agilent InfinityLab LC supplies provide the links within your InfinityLab LC purification solution to achieve the highest performance and operational efficiency. InfinityLab Quick Turn fittings with delay coil kits maximize your purification efficiency. Lab operations are improved with ergonomic solvent bottles and InfinityLab Stay Safe caps protect you from harmful solvent vapors.



InfinityLab supplies match perfectly with our InfinityLab LC Purification Solutions, taking advantage of the latest innovations to combine ease-of-use with robust performance.

## Efficient Control Through OpenLab Software

Agilent offers software and informatics solutions to reap all the benefits of your InfinityLab LC Purification System. Agilent OpenLab CDS ChemStation is powerful, easy-to-use software that puts you in complete control of your analytical- and preparative-scale purification workflows.

### Make your lab more productive with dedicated software

Agilent Automated Purification software is an easy-to-install add-on for OpenLab CDS ChemStation, and facilitates the automated transfer of purification methodologies from analytical to preparative scale. Calculation of focused gradients on-the-fly for each target compound ensures highest purity of fractions collected during preparative-scale purification runs.

- True automated scale-up from analytical to preparative scale through math algorithms
- Infinite number of focused gradients ensure highest purity and recovery
- Highest sample throughput and lowest solvent consumption through focused gradients
- Automated scale-up regardless of change in particle size, flow rate, or column dimensions
- Boolean logic of UV and mass signal for fraction triggering
- Fraction Result Browser displays collected fractions, and UV and mass spectral data at a glance



## Services and Support for Tangible Outcomes

Maximize performance and reliability by combining your InfinityLab LC Purification Solution with Agilent CrossLab – our coordinated method of delivering services and support that dramatically improve laboratory efficiency and productivity.

### Get the most from your investment

If you are ready for a true technology refresh of the instrumentation and software in your lab, Agilent CrossLab provides technology refresh services to enable rapid and seamless shift to the latest technology. Leave it to the experts to provide a speedy, stepwise upgrade that matches your needs and budget with minimal disruption to your workflows.

Agilent also offers comprehensive instrument and enterprise services. A full curriculum of Agilent University

learning solutions helps you to maximize uptime, simplify administration, and protect the investments in your laboratory. Through preventive maintenance, our service plans protect your laboratory against the unknown, for dependable efficiency, fewer workflow disruptions, and optimized laboratory productivity. All service plans include Agilent Remote Advisor, a powerful set of proactive, real-time support and reporting features, delivered by knowledgeable Agilent experts.

### Agilent CrossLab Service Agreements

	Gold	Silver	Bronze	Preventative Maintenance
<b>Services Included in Agilent CrossLab Service Agreements</b>				
Contract-level Preferred Response vs. On Demand services	★	★	★	★
Hardware Telephone Support	★	★	★	
<b>On-site Repair Services</b>				
All required On-site Repair Visits (travel & labor)	★	★	★	
Parts and Consumables Required for Repair*	★	★	★	
<b>Maintenance Services</b>				
Annual On-site Preventive Maintenance	★	★		★
<b>Advanced Diagnostics and Reporting</b>				
Agilent Remote Advisor-Assist**	★	★	★	
Agilent Remote Advisor-Report**	★	★	★	
Agilent Remote Advisor-Alert**	★	★		
<b>High Availability Services</b>				
Extended Coverage Hours Discount	★			
<b>Compliance Services (Optional)</b>				
Discount when Bundling Operational Qualification (OQ)	★	★		
Guaranteed Pass OQ	★	★		
Discount when Bundling Re-qualification (RQ)	★	★		
*Per local parts replacement policy.				
**Where available. Installation required. Installation fees waived when connecting minimum number of systems.				

Agilent CrossLab service plans let you choose the service level that best meets your needs, goals, and budget. Regional differences to service plans may apply. Additional options are available.

Learn more:

[www.agilent.com/chem/infinitylab-lc-purification](http://www.agilent.com/chem/infinitylab-lc-purification)

Buy online:

[www.agilent.com/chem/store](http://www.agilent.com/chem/store)

U.S. and Canada

**1-800-227-9770**

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