

Trust

Reliability

Performance

Welcome to Phenomenex

Since 1982 we have been dedicated to creating and delivering premium quality products for the separation sciences. Today we are a global leader and we back up our leading technologies with the highest service level in the industry.

We offer bulk chromatographic media and services that reduce your operating costs, shorten your development time, and ensure that you achieve the maximum return on your investment.



Partnering with Phenomenex

Setting the standard in service, quality, reliability and commitment

Confidence in a supplier of bulk purification resins doesn't stop with the ability to consistently deliver quality products on time. We partner with your team from initial development, through scale-up and into production, offering cost-effective solutions at each step.

Leveraging our expertise and technology in this way has proven successful in establishing many long-term relationships based on mutual trust and commitment. We view each new project we enter as an opportunity to reinforce our value to your organization.



"Our scientists at American Peptide have taken advantage of Phenomenex's column packing services, application development, and project-specific consultation services for some of our most challenging separations."

-American Peptide Company, USA





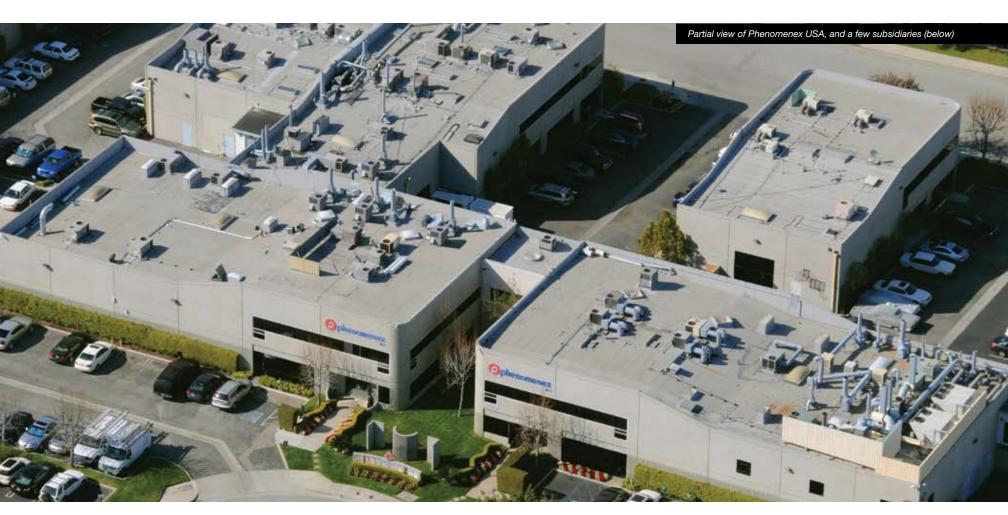


Our foremost mission is to promote the growth, prosperity and well being of those we serve our customers, our employees and humanity

The very existence of Phenomenex depends on the complete satisfaction of our customers. Our commitment to customer satisfaction has driven our growth and shaped our organization in a way that ensures we are able to meet the unique needs of all of our customers around the world.

When it comes to preparative/process chromatography, we've built a dedicated team of chemists, chemical engineers and support personnel that provides expert guidance even before an order is ever placed for our products. This group is focused entirely on assisting organizations around the world to identify, optimize and implement the best possible solutions to achieve critical separation and purification objectives.

In order to consistently deliver advanced, high-quality bulk resins to our ever growing customer base, we've designed specialized, high-capacity manufacturing facilities at our headquarters in Torrance, California, USA. To maintain the highest service level in the industry, Phenomenex leverages its presence in over 60 countries worldwide. Our vast network of subsidiary companies and distributor is ready to assist you in every step of your process.







Phenomenex Denmark



Phenomenex Germany







Global Bulk Chromatography Services

More than just advanced media

Our Global Chromatography Services Group is a multifaceted purification service and support network designed to provide media selection assistance and purification solutions to process scale and industrial scale chemists around the world.

We approach our bulk service efforts with over 28 years of industry experience, technical expertise and an unsurpassed dedication to our customers individual needs. Along with in-house development at our facility, our experts are available to be at your site for needs analysis, development assistance, and implementation.

There are many benefits in utilizing Phenomenex Bulk Services, even before the final purification media is chosen. Our strong commitment to your current and future applications includes:

- Media screening and selection (chiral, reversed phase, normal phase and ion-exchange)
- Trial scout columns
- Method development and optimization
- DAC (Dynamic Axial Compression) column packing assistance
- Scale-up studies
- Non-GMP purifications performed at our facility
- Technical assistance throughout the purification process
- Technical documentation and customer support files
- Custom designed training and seminars

Our goal is to assist you in minimizing your process purification development time and help you to reduce operating costs while maximizing your yield.

We deliver success!





We use the Phenomenex Luna HPLC as our standard purification media to purify our customer's peptides. In addition to the excellent loadability and selectivity of the media itself, the Phenomenex PREP Team supports their entire line of products very effectively.

- Major Biotech Manufacturer, USA

Media Innovation

Innovation is at the heart of Phenomenex

For nearly three decades Phenomenex has been a leading provider of advanced technology solutions for chromatographic techniques in the area of high-performance liquid chromatography (HPLC). Our progression from an analytical column supply company to one of the world's highest quality bulk silica and polymer manufacturers gives us a definitive edge. Innovation is engrained in our history and culture.

Phenomenex offers the most complete range of orthogonal ultra-performance media to meet your research, discovery, and production needs. With exacting performance from analytical to development and up to large process scale, Phenomenex media are available in a wide range of particle sizes.

Our unique chiral, reversed phase, normal phase, and ionexchange resins routinely offer significant production gains for maximum loadability with improved economy through media design.

Available Media

	Chiral Purification		
	Complete Chiral Solutions	%LUX	Unique polysaccharide chiral phases for HPLC, SMB, and SFC
	Small Molecule, Peptide, and Insulin Purification		
	Superior Loading		High surface area (100 Å; 400 m²/g) for maximum sample loading and resolution of closely eluting peaks
'	High pH Process Separations	I Gemini ^a	pH stable (1-12) media optimal for high alkaline washes (Insulin) and high pH purifications of basic drugs
	Polar and Aromatic Separations	# synergi [*]	Alternative selectivity to C18 that offers increased retention of small polar and/or aromatic compounds in HPLC and SFC
	Protein and Large Peptide Purification		
	Purification of Large Biomolecules	upiter	Provides excellent resolution between proteins with similar properties. Optimal for the separation of intact proteins > 10,000 MW
	edium Pressure Capture, Extraction, Concentration, Purification		
	Medium Pressure Applications	Sepra [*]	Polymer and silica based 30, 50 and 115 µm media available with polar, non-polar, and strong or weak ion-exchange chemistries

the most used media for our GMP peptide production. These medias show a batch to batch reproducibility and physical steadiness in our DAC columns. This is one of [the] keys to success in process chromatography.

François Kuster
Purification Team Leader
Polypeptide Laboratories France



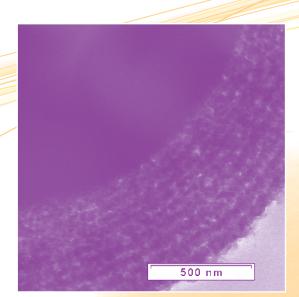
Our high surface area, mechanically stable HPLC media have been designed for demanding analytical and preparative separations. You can expect products that exceed your expectations for:

- Loading Capacity
- Reproducibility
- Lifetime
- Efficiency
- Robustness
- Selectivity
- pH Stability

We are constantly developing and commercializing new particle technologies and surface chemistries to serve the changing needs of our customers. Our purification media technology pipeline is well balanced and geared toward producing materials to complement our current state-of-the-art products.

If Jupiter 300 C4 is a silica based resin consisting of very stable particles and combines highest selectivity / resolution together with high capacity. Richter-Helm BioLogics [has] used Jupiter 300 C4 resin in three different preparative scales to date and recognized significant robustness and reproducibility regarding column packing quality, selectivity and capacity. Utilizing Jupiter 300 C4 resin in biopharmaceutical drug manufacturing enables a straight forward purification schedule saving facility time.

Richter-Helm BioLogics Dengelsberg, Germany







Our Quality Commitment

Quality assurance

Phenomenex's quality management system is ISO 9001:2008 certified. This certification validates that all our processes are fully established, functional, and meet international standards. Phenomenex's employees believe that the implementation of our quality system is everyone's responsibility. From the manufacturing of our products to their timely delivery and continued customer support, we are dedicated to the continued improvement of our processes in order to consistently meet and exceed our customers' expectations.

Audits

We have successfully passed audits from several major Pharma and Biotech organizations along with numerous leading peptide contract manufacturing companies. These audits consistently result in comments regarding the effectiveness of our quality management system. We welcome visits by your scientists, engineers and quality assurance groups to validate Phenomenex as a valuable partner.

Our quality guarantee

At Phenomenex, quality has been planned into every step of our production sequence. Our bulk purification media undergoes extensive validation. Highly specific tests are performed to ensure that all of the critical physical and chemical characteristics of the media fall within very tight specifications. Every batch of our bulk media is supported with a Material Validation Document (MVD) that captures the results of these tests.

Physical/chemical property tests

- Particle Size and Size Distribution
- Pore Diameter
- Surface Area
- Metal Content and Purity
- Carbon Load
- Bonded Phase Surface Coverage



Chromatographic performance tests

- Inertness
- Hydrogen Bonding
- Metal Sensitivity
- Polar Retention
- Silanol Activity
- · Peptide Resolution
- Selectivity
- Protein Resolution
- Hydrophobic Index







Confident, Secure Supply

Secrets of our success

Our reputation and long-term partnerships have been critical to the continuous success of Phenomenex, making our close relationship with you our most valuable asset.

From a market leading position in the analytical HPLC business, Phenomenex has naturally progressed and grown our manufacturing capabilities to encompass the needs of process scale and industrial scale customers. Today, we

deliver a variety of media from gram to multi-kilogram scale to our global customers on a consistent basis.

Regardless of the scale, our manufacturing process allows us to keep a significant inventory and provide you with timely delivery of your industrial bulk media anywhere in the world.

We are well positioned to handle your immediate and future purification demands.





We have been very happy with the availability and supply of Luna bulk media over the past several years.

-Bachem AG, Switzerland





Trust, Reliability, Performance

We are ready to partner with you

The needs of preparative, process and industrial purification specialists worldwide are being met by the Phenomenex Prep Team and the outstanding products and services we provide.

Consult with your local Phenomenex Bulk Specialist today and let's get started.

Contact us on the Web or at your local Phenomenex office.

www.Phenomenex.com/info/Bulk



Australia

t: 02-9428-6444 f: 02-9428-6445

auinfo@phenomenex.com

t: 01-319-1301 f: 01-319-1300

anfrage@phenomenex.com

Belgium

t: +31 (0)30-2418700 f: +31 (0)30-2383749 beinfo@phenomenex.com

Canada

t: (800) 543-3681 f: (310) 328-7768

info@phenomenex.com

t: 4824 8048

f: 4810 6265 nordicinfo@phenomenex.com

Finland

t: (09)4789 0063 f: +45 4810 6265

nordicinfo@phenomenex.com

France

t: 01 30 09 21 10 f: 01 30 09 21 11 franceinfo@phenomenex.com

Germany

t: 06021-58830-0 f: 06021-58830-11 anfrage@phenomenex.com

Ireland

t: 01 247 5405 f: +44 1625-501796 eireinfo@phenomenex.com

Italy

t: 051 6327511

f: 051 6327555 italiainfo@phenomenex.com

Luxembourg

t: +31 (0)30-2418700 f: +31 (0)30-2383749 nlinfo@phenomenex.com

Mexico

t: (55) 5018 3791

f: (310) 328-7768 tecnicomx@phenomenex.com

Netherlands

t: 030-2418700

f: 030-2383749 nlinfo@phenomenex.com

New Zealand

t: 09-4780951 f: 09-4780952 nzinfo@phenomenex.com

Norway

t: 81 00 20 05 f: +45 4810 6265 nordicinfo@phenomenex.com

Puerto Rico

t: (800) 541-HPLC f: (310) 328-7768 info@phenomenex.com

United Kingdom

t: 01625-501367 f: 01625-501796 ukinfo@phenomenex.com

All other countries: Corporate Office USA

t: (310) 212-0555 f: (310) 328-7768 info@phenomenex.com



www.phenomenex.com

Phenomenex products are available worldwide. For the distributor in your country, contact Phenomenex USA, International Department at international@phenomenex.com

www.Phenomenex.com/info/Bulk

