



Article No.: A49032  
Article name: AZURA Bio Lab System

## Multi Method FPLC System, Lab standard for all Bio-Chromatography methods

The AZURA Bio Lab System is a gradient system for complex purifications of bio molecules in a laboratory scale. It is designed and optimized for all FPLC applications like affinity, ion exchange, hydrophobic interaction and size exclusion chromatography. All system modules can be freely exchanged and further modules can be added optionally, to give you the best configuration for your purification task.

The standard lab system consists of a biocompatible buffer pump equipped with two pump heads to form a reliable buffer gradient. However you can also choose a quarternary low pressure pump, which can automatically blend your buffer in line out of four stock solutions or one channel can be used for convenient sample application. Monitor your gradient using a conductivity monitor and inject samples via the multi injection valve, which also allows the optional integration of a sample pump. Detection of your samples is carried out by the integrated variable single UV wavelength detector and collected by the fraction collector. An optional column selection valve will allow you to switch between a multitude of different columns.

The system is controlled via the user friendly FPLC software PurityChrom, which offers a high flexibility in

**Help**

**Schedule your free consultation now**

method development and provides you with complete control over the whole system at any stage of the purification.



*AZURA Bio Lab System: exemplary configuration, including a sample pump and the column selection valve*

[Schedule your free consultation now](#)

## TECHNICAL DATA

### System specification

<b>Purification</b>	complex, challenging
<b>Application</b>	suitable for all
<b>Gradient</b>	Yes
<b>Flow rate</b>	50 ml/min

[Schedule your free consultation now](#)

## SYSTEM COMPONENTS



### AZURA P 6.1L

Article No. APH68FB

AZURA® Pump P 6.1L (HPG), without degasser, with 50 ml pump head (ceramic) and mixer (250 µl)

Max. flow rate : **50 ml/min**

Pump head materials : **Ceramic**

Gradient : **High pressure gradient (binary)**

Pump features : **Active pulsation compensation, RFID for automatic pump head detection, Integrated pressure sensor, Purge valve (manual), Leak management, Piston seal wash**

Maximum delivery pressure [MPa] : **20 MPa**



### AZURA Assistant ASM 2.2L

Article No. AY01421

Left module: UV detector UVD 2.1S - EDA03XA Middle module: Valve drive VU 4.1 - EWA04 Right module: Empty module

Left module : **UV detector UVD 2.1S - EDA03XA**

Middle module : **Valve drive VU 4.1 - EWA04**

Right module : **Empty module**



### Semi-preparative UV Flow Cell

Article No. A4045

3 mm path length, 2 µl, 1/16", 30 bar, biocompatible, classical KNAUER flow cell

Flow cell type : **Semi-preparative UV flow cell**

Path length : **3 mm**

Capillary connection : **1/16"**

Max. flow rate : **50 ml/min**

Flow cell volume : **2 µl**

[Schedule your free consultation now](#)



### AZURA V 4.1 Valve

Article No. AVN94CE

Especially for FPLC customers: New biocompatible multi-injection valve for more sophisticated separation tasks. (PEEK, 1/16", 240 bar, 0.75 mm bore size)

Operated : **electrical by VU 4.1**

Port number : **8**

Positions : **Multiposition**

Material : **Biocompatible**

Capillary connection : **1/16"**



### 500 µl Sample loop

Article No. A1057

Sample loop, 500 µl, PEEK, 240 bar, 0.75 mm ID



### 1 ml Sample loop

Article No. A0423

Sample loop 1 ml, PEEK, 240 bar, 0.75 mm ID

[Schedule your free consultation now](#)

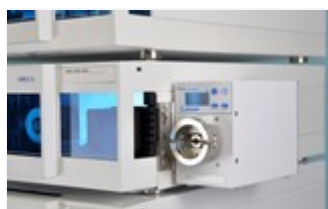


### **AZURA CM 2.1S with flow cell - up to 100 ml/min**

Article No. ADG30GD

AZURA CM 2.1S with flow cell - up to 100 ml/min - conductivity monitor with optional pH measurement

Detector type : **Conductivity monitor**



### **Mounting bracket for VU 4.1, CM 2.1S and UVD 2.1S**

Article No. A9854-3

Mounting bracket AZURA® L for AZURA® Valve Unifier VU 4.1 (both-sided) or AZURA® UVD 2.1S and AZURA® CM 2.1S (left-sided on AZURA® L)



### **Fraction Collector Foxy R1**

Article No. A59100

Fraction collector Foxy® R1 for 1/16" or 1/8" tubing

Max. flow rate : **25 ml/min or 125 ml/min**

Capillary connection : **1/16" or 1/8"**

Brand : **Foxy R1**



### **Rack for Foxy R1/R2**

Article No. A59106

Rack for 72 Falcons 15 ml for Foxy® R1/R2

[Schedule your free consultation now](#)



### **AZURA Eluent tray E 2.1L**

Article No. AZC00

AZURA® Eluent tray E 2.1L for AZURA® devices with a capacity of 6 x 1 l bottles or 4 x 2.5 l bottles or 2 x 5 l bottles, (delivery without bottles)

Type : **Eluent tray**

---



### **Set of eluent supply bottles for analytical LPG systems**

Article No. A5324-2

Set of eluent supply bottles, 4 x 1 L bottles for Eluents and 1 x 250 ml bottle for piston backflushing, includes screw caps with holes for eluent tubing

---



### **PurityChrom® Basic**

Article No. A2650

Basic License for one system

Software name : **PurityChrom® 5**

---



### **NETGEAR Switch 5-Port international**

Article No. A3126INT

5-port Fast Ethernet switch NetGear FS105 5x RJ-45, 100 MBit, power plug UK, US or AUS

---

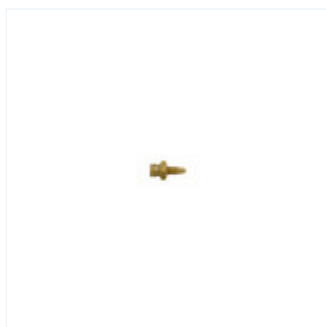
[Schedule your free consultation now](#)



### **Chromatography Workstation: PC plus monitor**

Article No. A13120

Desktop PC (SFF) for PurityChrom® and ClarityChrom® with 24" monitor, English edition Windows 10 Prof. 64-bit English, Intel® Core™ i5, 8 GB RAM, 256 GB SSD, two network cards



### **Luer Adapter to 10-32, ETFE**

Article No. A1980

Luer Adapter to 10-32, ETFE, female Luer to male 10/32 threads for injection, simply screw the adapter in the port of your injection valve



### **AZURA FPLC Start-up kit, PEEK/Tefzel, 1/16"**

Article No. A70600

AZURA® FPLC Start-up kit, PEEK/Tefzel, 1/16" for 50 ml/min FPLC systems



### **Back-Pressure Regulator**

Article No. A70087

Back-Pressure Regulator for 1/16" OD tubing, 10-32 threads, PEEK, Range 1-20 bar (15-300 psi)

[Schedule your free consultation now](#)





### **Inline Filter, PEEK/Titanium, 1/16", biocompatible**

Article No. A3379

Inline Filter, PEEK/Titanium, 1/16", biocompatible, to protect your column, with 10 µm pore size titanium frit



### **Tool kit AZURA**

Article No. A1033

Tool Kit AZURA® for systems with PEEK or pre-cut capillary kits

Type : **Tool kit**

[Schedule your free consultation now](#)

## ACCESSORIES & SPARE PARTS



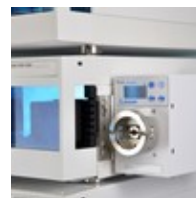
**Smart valve drive with  
RFID-technology**  
VU 4.1 valve drive for V 4.1  
valves

**Article No.: AWA01XA**



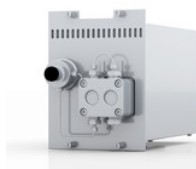
**Biocompatible column  
selection valve**  
Column Selection Valve  
VICI for 5 columns, 1  
bypass, reverse flow, 12  
ports, 1/16", 50 bar

**Article No.: AVZ52CE**



**Mounting bracket**  
Mounting bracket AZURA®  
L for AZURA® Valve Unifier  
VU 4.1 (both-sided) or  
AZURA® UVD 2.1S and  
AZURA® CM 2.1S (left-  
sided on AZURA® L)

**Article No.: A9854-3**



**Compact pump with 50  
bar pressure sensor, 50  
ml/min stainless steel  
pump head for ASM 2.2L**  
Assistant module P 4.1S,  
50 bar, 50 ml, stainless  
steel

**Article No.: DPG12FA**

[Schedule your free consultation now](#)

## DOCUMENTS AND MORE INFORMATION

### **AZURA Bio LC brochure**

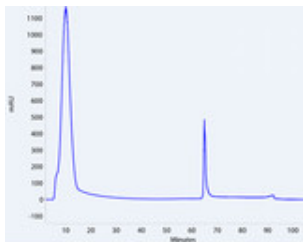
FPLC and Purification Solutions, V7855US

Brochure   English

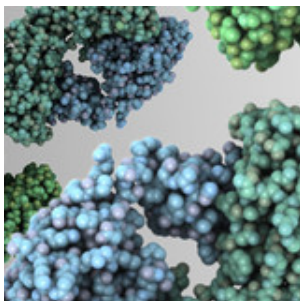
---

[Schedule your free consultation now](#)

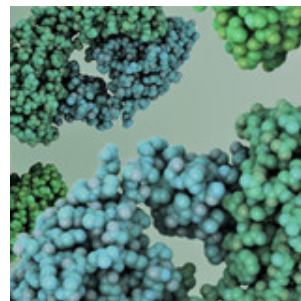
## APPLICATIONS FOR THIS PRODUCT



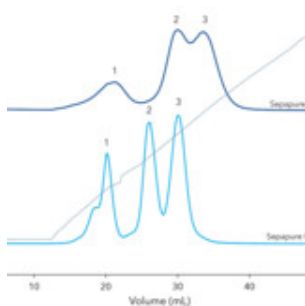
**Purification of human antibodies from serum by Protein A affinity chromatography**



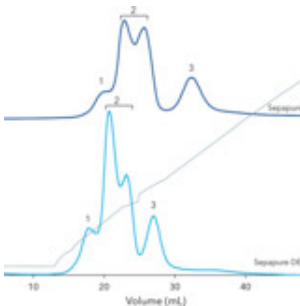
**How to optimize your purification?**  
**Your guide for two step purification - principles and system set up**



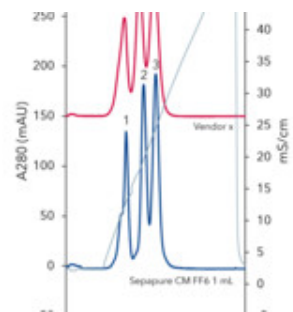
**Two step purification with a basic set up**



**Separation of proteins with cation exchange chromatography on Sepapure SP and CM**

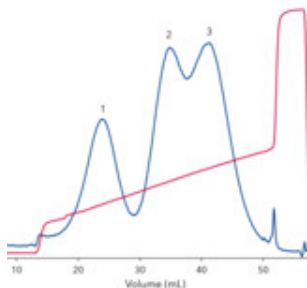


**Separation of proteins with anion exchange chromatography on Sepapure Q and DEAE**

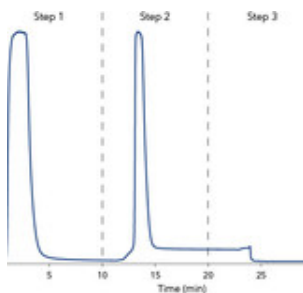


**Comparison of ion exchange columns**

**Schedule your free consultation now**



**Ion Exchange  
Chromatography  
with AZURA® Bio  
Lab system**



**Comparison of IgG  
purification by two  
different protein A  
media**

## RELATED PRODUCTS



**Bio Purification System for  
SEC, Lab standard**  
For size exclusion  
chromatography up to 10  
ml/min

**Article No.: A49030**



**Bio Purification System for  
AC, Lab standard**  
For affinity  
chromatography up to 50  
ml/min

**Article No.: A49031**



**Advanced Bio purification  
system**  
for complex applications  
including automated two  
step applications

**Article No.: A49033**

## RELATED FAQs

**How to control the supply of the buffers by PurityChrom to prevent the column from running dry?**

PurityChrom | Software

[Schedule your free consultation now](#)

---

### **What are the different injections techniques used in FPLC?**

FPLC | PurityChrom | Autosampler

---

### **How to avoid air entering the FPLC system?**

FPLC | Troubleshooting

---

### **What is two step purification?**

FPLC

---

### **Why should I use two step purification?**

FPLC

---

### **What are the benefits of two step purification?**

FPLC

---

### **How to build a system for two step purification with the basic set up?**

FPLC

---

### **Which set up should I use for my two step purification?**

FPLC

---

### **How can I prevent peak broadening in an FPLC system?**

FPLC

---

### **Does a back pressure regulator affect the pressure limit of the column?**

FPLC | Troubleshooting

---

### **What can I do with an air sensor in an FPLC system?**

FPLC | PurityChrom | Troubleshooting

---

### **Can I do multi step purification?**

FPLC

---

[Schedule your free consultation now](#)

## How to rapidly transfer methods in PurityChrom to columns with different column volume?

PurityChrom | Software

---

## What is a delay volume?

FPLC | PurityChrom

---

## What can be the Source of the backpressure of my system and how can I reduce it?

FPLC | Troubleshooting

---

## What can be the reason of a fluctuating UV-detector signal in my FPLC system?

Troubleshooting | Detectors | FPLC

---

## What are the system requirements and which system set ups are available for two step purification?

FPLC

---



## Do you need more details or a quote?

We are happy to help you



+49 30 809727-0



[sales@knauer.net](mailto:sales@knauer.net)

Technical data or prices are subject to change without notice. Prices may vary by country and do not include taxes, customs duties or delivery.

All trademarks are the property of their respective owners. Our general terms and conditions apply: [www.knauer.net/terms](https://www.knauer.net/terms)

[Schedule your free consultation now](#)