



Article No.: A49033

Articlename: AZURA Bio Lab System Advanced

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

The AZURA Bio Lab System Advanced 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 quaternary 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 optimal integration of the sample pump to inject large sample volumes. Detection of your samples is carried out by the integrated variable multi UV wavelength detector and collected by the fraction collector. An column selection valve will allow you to switch

Help

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between a multitude of different columns, which in combination with an optional outlet valve allows even for automated two step purifications.

The system is controlled via the user friendly FPLC software PurityChrom, which offers a high flexibility in method development and provides you with complete control over the whole system at any stage of the purification.



AZURA Bio Lab System Advanced: exemplary configuration for automated two step applications including the optional fractionation valve

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TECHNICAL DATA

System specification

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

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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. AY00514

Left module: Empty module Middle module: Pump P 4.1S, 50 bar, 50 ml, ceramic - DPG12FB Right module: Valve drive VU 4.1 - EWA04

Left module : **Empty module**

Middle module : **Pump P 4.1S, 50 bar, 50 ml, ceramic - DPG12FB**

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



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"**

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500 µl Sample loop

Article No. A1057

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



AZURA Detector MWD 2.1L

Article No. ADB01

AZURA® Detector MWD 2.1L Multiwavelength detector MWD 2.1L, without flow cell 190 - 700 nm, incl. test cell

Detector type : **Variable multiwavelength detector**

Detection channels : **8 (Digital)/4 (Analog)**

Wavelength range : **190 - 700 nm**

Linearity : **> 2.0 AU at 274 nm (ASTM E1657-98)**



Semi-preparative KNAUER PressureProof UV Flow Cell Cartridge

Article No. AMB18

3 mm path length, 2µl, 1/16", 300 bar, PressureProof Flow cell cartridge for AZURA® Detector DAD/MWD

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

Path length : **3 mm**

Capillary connection : **1/16"**

Max. flow rate : **100 ml/min**

Flow cell volume : **2 µl**

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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**



VICI column selection valve

Article No. AVZ52CE

Column Selection Valve VICI for 5 columns, 1 bypass, reverse flow, 12 ports, 1/16", 50 bar

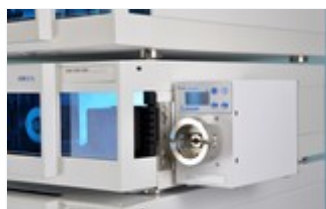
Operated : **electrical by VU 4.1**

Port number : **12**

Positions : **Multiposition**

Material : **Biocompatible**

Capillary connection : **1/16"**



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**

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Rack for Foxy R1/R2

Article No. A59106

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



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**

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PurityChrom® 5 Upgrade

Article No. A2652

Extends the Basic License to an unlimited number of controllable devices and 8 data channels, adds autosampler and stacked injections support

Software name : **PurityChrom® 5**



Chromatography Workstation: PC plus monitor

Article No. A13120

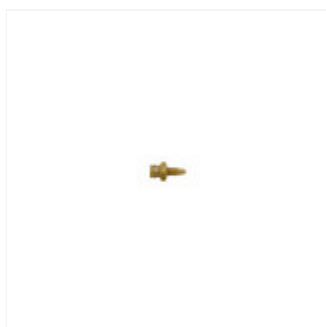
Desktop PC (SFF) for PurityChrom® and ClarityChrom® with 24" monitor, English edition Windows 10 Prof. 64-bit English, Intel® Core™ i5, 8 GB RAM, 256 GB SSD, two network cards



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



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

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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



NETGEAR Switch 8-port international

Article No. A3119INT

8-port LAN GBit switch NetGear GS108GE, 8x RJ-45, GBit, Auto MDI-X, power plug UK, US or AUS



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)



Air Sensor

Article No. A70092

Air sensor (1/16") for AZURA® Bio LC with one air sensor and wiring for up to 4 air sensors

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Distribution Box 24 V for auxiliary equipment

Article No. AZS80SA

Power Supply: Distribution Box 24 V for 6 devices like air sensor, external pressure sensor, IFU 2.1 LAN



AZURA Click

Article No. A70089

AZURA® Click rail for AZURA® L devices for attaching IFU 2.1 LAN, air sensor, pressure Control and the AZURA® Organizer



AZURA Organizer

Article No. A70085

AZURA® Organizer Holder for AZURA® Click for attaching falcons, columns (5 mm - 26 mm OD) and the pH Flow Cell

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ACCESSORIES & SPARE PARTS



**Universal valve drive for
ASM 2.2L
Assistant module VU 4.1
for valves V 4.1
Article No.: EWA04**



**Biocompatible
multiposition valve, 8 Port
Multiposition valve, 8 Port,
PEEK, PEEK, 1/16", 240 bar,
0.75 mm bore size
Article No.: AVS34CE**

DOCUMENTS AND MORE INFORMATION

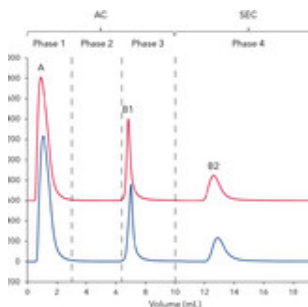
AZURA Bio LC brochure

FPLC and Purification Solutions, V7855US

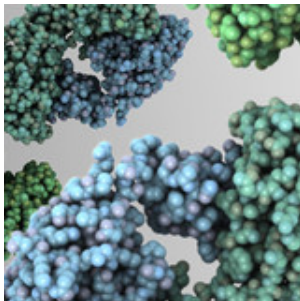
Brochure English

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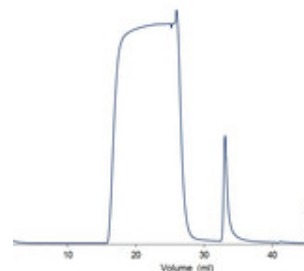
APPLICATIONS FOR THIS PRODUCT



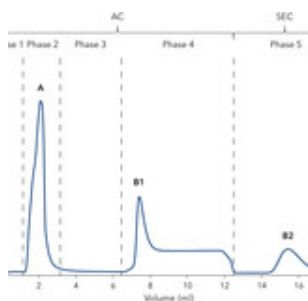
Comparison of two column sets for antibody purification in an automated two step purification process



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



Automated two - step purification of mouse antibody IgG1 with AZURA Bio LC Lab system



Automated two-step purification of 6xHis-tagged GFP with AZURA Bio LC

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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



**Multi Method FPLC
System, Lab standard**
for all Bio-Chromatography
methods
Article No.: A49032

RELATED FAQs

How to build a system for two step purification with the set up with sample pump?

FPLC

What is two step purification?

FPLC

Why should I use two step purification?

FPLC

What are the benefits of two step purification?

FPLC

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

FPLC

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Can I do multi step purification?

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?

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