



# NGC™ Chromatography Systems

Comprehensive Solutions for Protein Purification



# DESIGNED BY YOU. BUILT BY BIO-RAD.

## NGC Medium-Pressure Chromatography Systems

The NGC instrument is an automated liquid chromatography system focused on biomolecule purification at the research, process development, and laboratory-scale levels. At the core of the NGC platform is a truly modular and scalable system combined with a single, intuitive software package for system control and evaluation. Together, the NGC systems provide a total laboratory solution.



**ALIGNS**

A single solution that aligns to your needs today and expands to support your future discoveries and throughput requirements



**ADAPTS**

A flexible system that adapts to your requirements and can be easily customized to suit your application needs



**ASSURES**

An intelligent design that assures functional simplicity and guides you from experimental setup to analysis and support





## A single laboratory chromatography solution that aligns and scales to fit your throughput requirements

NGC systems can be selected based on customer needs and can be further customized to fit changing customer requirements through the addition of more modules and capabilities.

### Capabilities included in all NGC systems

Choice of 10 ml/min or 100 ml/min system pumps, mixer module with multiple mixer barrel options (750 µl, 2 ml, 5 ml, 12 ml), automated sample inject valve, ChromLab™ software, and a touch screen.

### Options available for all systems

Compatible with the BioFrac™ fraction collector for automated fraction collection (analytical- to preparative-scale) and with the C-96 autosampler for automated sample application.



### NGC Quest™ System

Designed for the easy, dependable, and all-purpose purification of biomolecules with accurate gradients and high-resolution separations

#### Base system includes:

- Single-wavelength (UV) and conductivity detection
- ChromLab software, for fast, easy automated and manual control — single platform compatible with all NGC systems

### NGC™ Quest Plus System

Designed for the all-purpose purification of biomolecules and simultaneous detection of proteins, peptides, nucleic acids, and other chromogenic molecules.

#### Includes NGC Quest capability, plus:

- Multi-wavelength (UV/Vis) detection of up to four wavelengths simultaneously

### NGC Scout™ System

Designed for quick, reliable separations of proteins and peptides. Enables rapid scouting of protein purification conditions with automated gradients and buffer preparation

#### Includes NGC Quest capability, plus:

- Buffer blending valve for automated inline buffer preparation
- pH valve to monitor buffer pH and separation by pH gradients

### NGC™ Scout Plus System

Designed for the simultaneous detection of proteins, peptides, nucleic acids, and other chromogenic molecules with expanded automation and scouting

#### Includes NGC Scout capability, plus:

- Multi-wavelength (UV/Vis) detection of up to four wavelengths simultaneously

### NGC Discover™ System

Designed for higher throughput, rapid, and robust method and process development. Provides expanded scouting options with the simultaneous detection of proteins, peptides, nucleic acids, and other chromogenic molecules

#### Includes NGC Scout Plus capability, plus:

- Integrated sample pump, 100 ml/min
- Sample inlet valves
- Column switching valve, 10 ml or 100 ml options

### NGC™ Discover Pro System

Designed for higher throughput, rapid, and secure method and process development

#### Includes NGC Discover capability, plus:

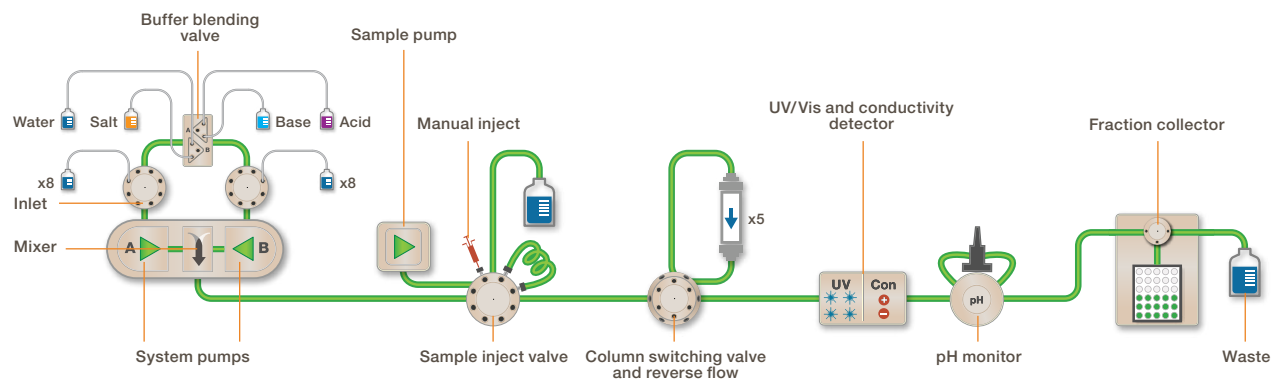
- Sample inlet valve
- Sample outlet valve\*

#### Options

- Tandem purification with additional column switching valve\*

\*Coming soon

# NGC SYSTEM CAPABILITIES



## System Pumps

Pump selection of up to 10 ml/min or 100 ml/min flow rates with the option to switch out pumps to meet your application requirements.

### F10 pumps

- Flow rate of 0.001–10 ml/min at 3,650 psi (25.2 MPa)
- Ideal for small-scale preparative purifications
- Can also be used for analytical HPLC separations

### F100 pumps

- Flow rate of 0.01–100 ml/min at 1,450 psi (10 MPa)
- Flexible flow rate range
- Ideal for scale-up applications

## Sample Pump

For automated sample application with the ability to load large sample volumes. Includes an integrated pressure sensor.

## Mixer

Homogenizes buffers from two system pumps and can accommodate varying volumes (different sized barrels are available). Includes a mixer motor and integrated pressure sensor.

## Detectors

Ensure accurate detection of biomolecules such as proteins, peptides, nucleic acids, and chromophores. Include an integrated conductivity monitor (0.01–999 mS/cm) and an optional pH monitor (pH 1–14).

### Single-wavelength (UV) detector

For the detection of standard proteins (280 nm) and nucleic acids (255 nm).

### Multi-wavelength (UV/Vis) detector

For greater sensitivity and flexible detection of any biomolecules and chromophores (190–800 nm). Simultaneous multi-wavelength (UV/Vis) detection of up to four wavelengths.

## Air Sensor

Detects end of buffer and sample to protect against column damage. Air sensor extension enables use of up to four additional air sensors (eight total).

## Valves

### Sample Inject Valve

For accurate sample loading ( $\mu$ l to L volumes) with a low internal volume for minimal sample loss.

### Buffer Blending Valve

For fast pH scouting with automated inline buffer preparation and the ability to double the fluid output to 20 ml/min or 200 ml/min.

### pH Valve

For accurate, inline pH monitoring (pH 1–14). Includes integrated bypass valve and calibration port for in situ calibration.

### Buffer Inlet Valve

Automated switching between buffers (up to eight inlets per valve) for accelerated method development, column cleaning, and regeneration. Option to include two inlet valves, one for each system pump.

### Column Switching Valve and Reverse Flow

Automated column/media scouting of up to five columns without re-plumbing. Includes reverse flow for rapid elution, sample concentration, and column cleaning. Internal bypass allows automated system priming and cleaning with integrated pressure sensors that measure pre- and delta-column pressures.

### Outlet Valve\*

For enhanced automated fraction collection of large volume fractions with up to 12 vessels.

## Accessories

### BioFrac Fraction Collector (catalog #741-0002)

Reliable fraction collection from analytical to preparative scale with versatile capability to collect from 96-well plates to 20 mm tubes — fully compatible with all NGC systems.

### C-96 Autosampler (catalog #788-5011 and #788-5012)

Provides automated, accurate, and reproducible sample injections for optimal sample handling with optional cooling.



\*Coming soon

# PERSONALIZE AND EXPAND YOUR SYSTEM CAPABILITIES TO SUIT YOUR APPLICATION NEEDS AND WORKFLOW

## Tier Rotate™ Options (3rd and 4th Tiers)

Flexible system design enables optimal placement of valves and detectors to minimize hold-up volume

Magnetic column holders for optimal column placement

Add a tier for more capabilities

## Touch screen

Enables manual control for on-the-fly editing, real-time status updates, and calibration. Can be tethered to the left or right side



Buffer tray

Outlet valve

Sample inject valve



Real-time status display

pH valve

UV/Vis and conductivity detector

Sample pump, 100 ml/min

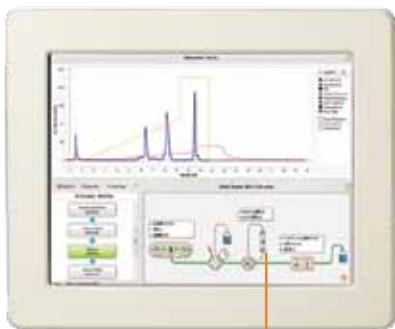
Inlet valve

Column switching valve with reverse flow

Buffer blending valve

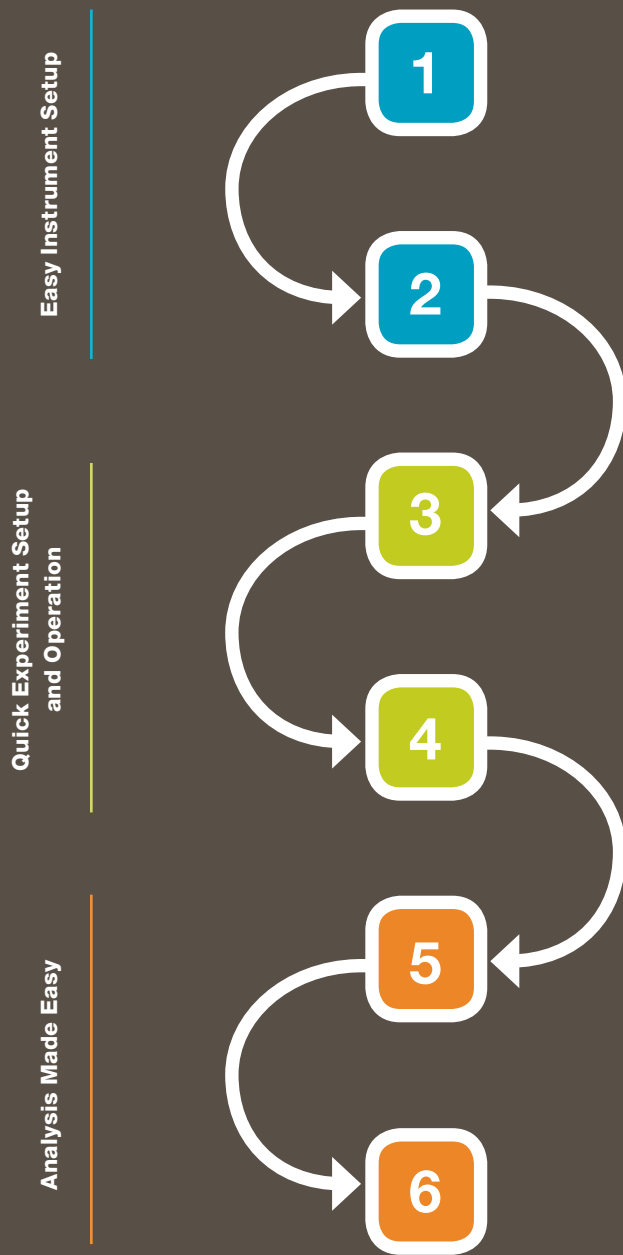
System gradient pumps, 10 ml/min or 100 ml/min

Mixer





Powerful ChromLab software control, transferable across all NGC systems, enables minimal training and fast setup to analysis



## Select Fluidic Scheme

Guided fluidics selection allows application-based system setup with patent-pending adjustable fluidics selector

## Plumb System

Point-to-Plumb™ lighting provides step-by-step LED-guided setup for easy plumbing and eliminates the potential loss of precious sample or waste of expensive columns

## Design Experiment

Quick and easy method setup and design using the powerful, intuitive ChromLab software

## Control Experiment

Real-time flow path display controls buffer, sample, and valve position for easy identification of system status

## Data Analysis

Integrated data analysis with easy integration of multiple peaks and runs

## Confirm Purification and Separation

Confident protein separation, gel imaging, and analysis with stain-free imaging technology

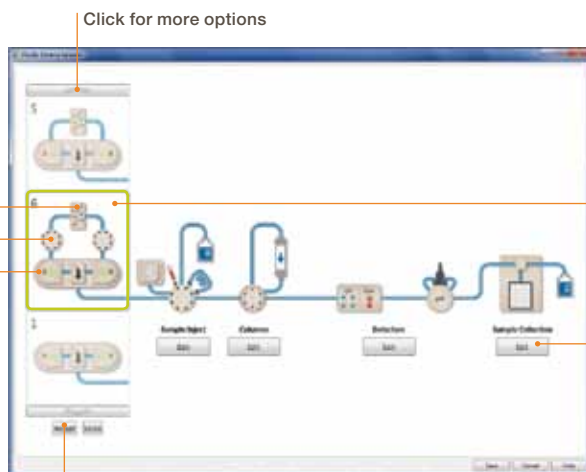
# EASY INSTRUMENT SETUP

1

## Select Fluidic Scheme

Select the fluidic scheme that best fits your application, set a default path, and optimize your module placement

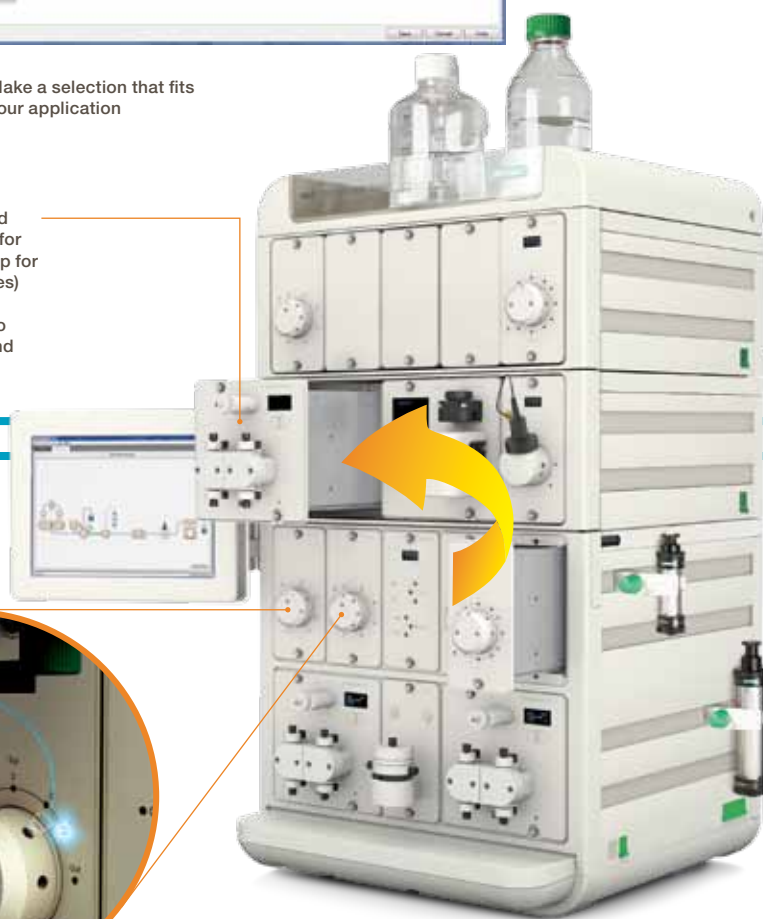
To view the complete module library see Bulletin 6326 or the NGC system tour at [www.bio-rad.com/NGCsystems](http://www.bio-rad.com/NGCsystems)



Make a selection that fits your application

**Choose** new modules to add to your system capabilities (for example, add a sample pump for loading large sample volumes)

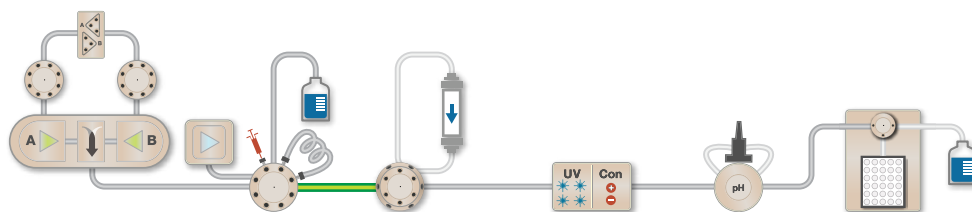
**Change** module locations to adjust to your application and achieve optimal results



2

## Plumb System

Point-to-Plumb intuitive graphical indicators for simple, guided LED plumbing setup



Click on each step in the flow path to guide system plumbing. Then, appropriate LEDs will light up to guide plumbing (as shown above).

# QUICK EXPERIMENT SETUP AND OPERATION

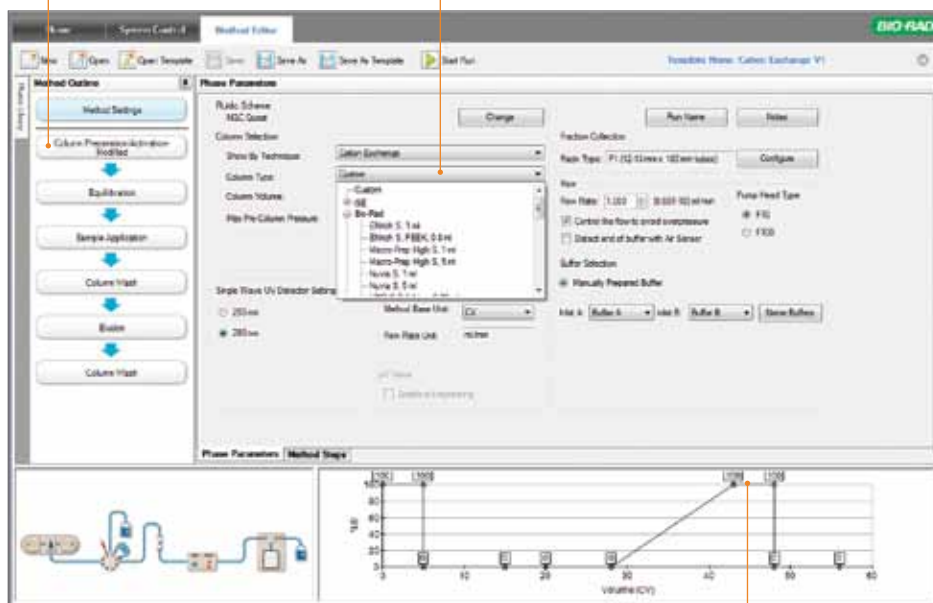
3

## Design Experiment

The ChromLab Method Editor enables confident, automated walk-away purification

Phase-based method editing

Extensive column library selection and intuitive interface for custom self-packed columns



Drag and adjust %B for quick adjustment to the gradient phase

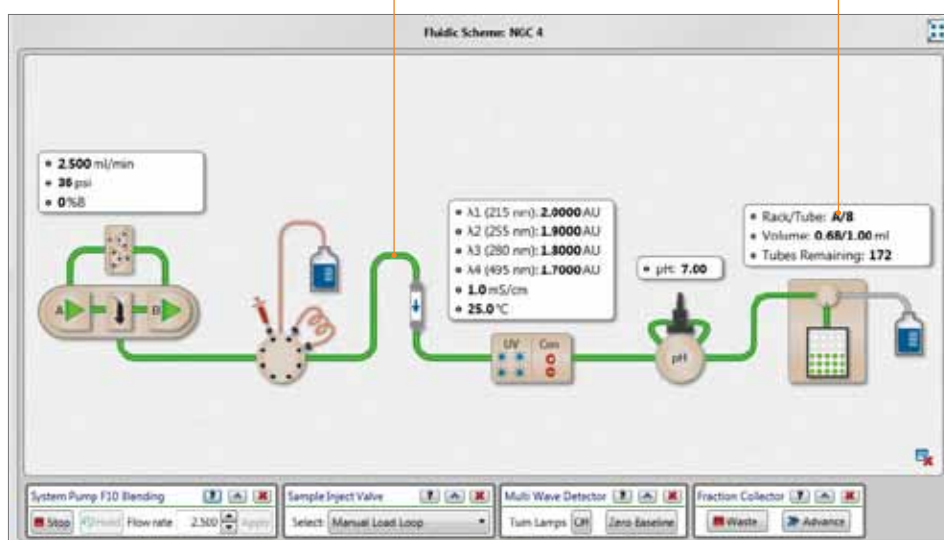
4

## Control Experiment

Manual controls conveniently located for quick and easy access provide total graphical user control of the NGC system with a coldroom-compatible touch screen or a computer

Active flow path (green) is clearly highlighted for both sample and buffer

Real-time status displays of flow path devices



Graphical, manual control panel allows complete, accessible control of the system

Use the touch screen for making quick adjustments while in the coldroom or at your deli fridge



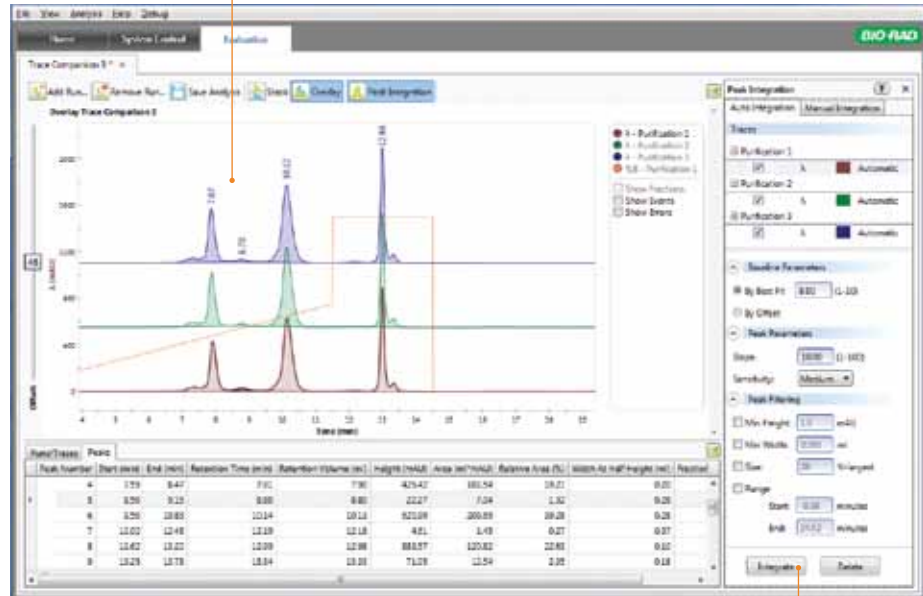
# ANALYSIS MADE EASY

5

## Data Analysis

Comprehensive data analysis that enables fast, accurate data comparison

Ability to overlay and zoom in on multiple chromatograms



Simple peak integration across multiple runs with single button auto-integration

6

## Confirm Purification and Separation

Confident protein separation, gel imaging, and analysis with stain-free imaging technology

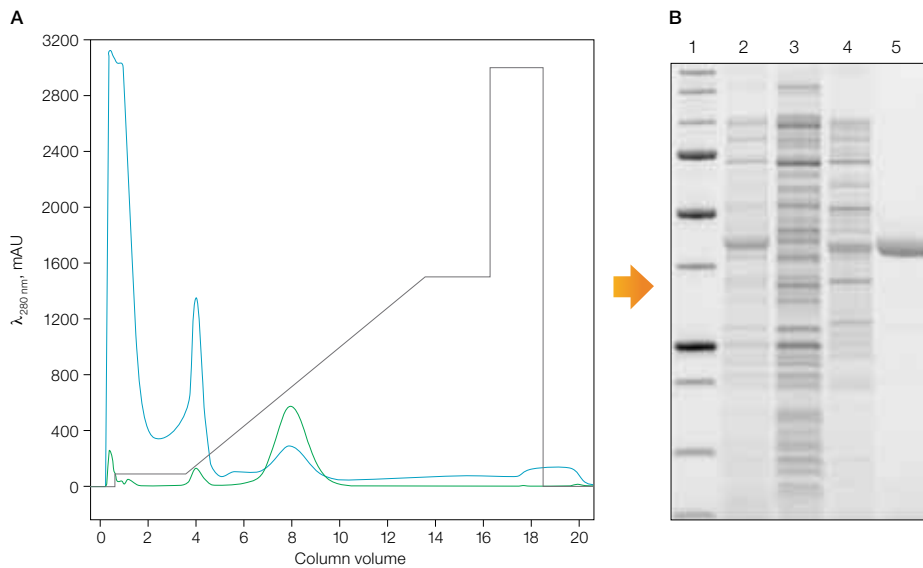
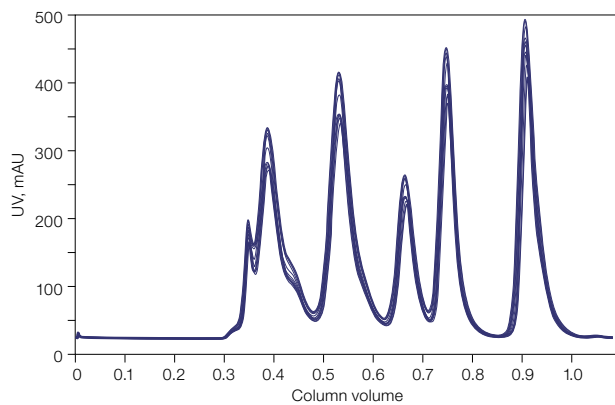


Fig. 1. A, isolation of a histidine-tagged GFP protein from a crude *E. coli* lysate by affinity chromatography using an IMAC column. B, purification was confirmed by SDS-PAGE using a Criterion™ TGX Stain-Free™ gel. Samples in lanes 2 (crude *E. coli* lysate), 3 (flowthrough from IMAC column), 4 (10% imidazol column wash), and 5 (purified histidine-tagged GFP protein) were compared against Precision Plus Protein™ Unstained molecular weight standards (lane 1).

## Intelligent design that guides your setup and operation

### Pre-plumbed system

QC-validated performance optimized for low hold-up volume translates to more reproducible results and sharper peaks



**High-quality results with reproducible separations.** Eleven overlaid separations of a Bio-Rad size exclusion standard — composed of thyroglobulin,  $\gamma$ -globulin, ovalbumin, myoglobin, and vitamin B12 — performed on the NGC Quest system with a 10 x 300 mm size exclusion column.

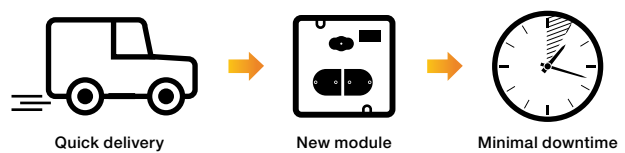
### Real-time status displays

Provide immediate status of important parameters for clear diagnostics of key NGC instrument modules



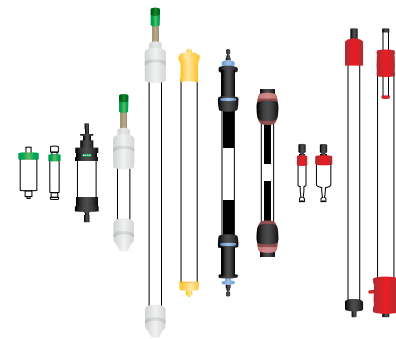
### Module replacement service

Directly replace plug and play modules — eliminate lengthy downtime and costly service visits

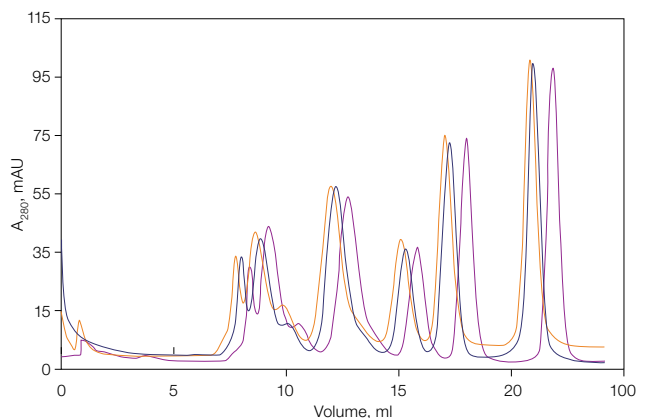


### Open platform

Compatible with all medium-pressure columns and ChromLab software includes method templates with column libraries



### Validated column applications on the NGC System



**Completely transferable applications.** Identical comparisons of a Bio-Rad size exclusion standard (cat #151-1901) performed on a Superdex 200 10/300 GL size exclusion column with separations performed on the NGC Quest (—), ÄKTApurifier (—), and ÄKTA avant (—) systems.

# SELECTION GUIDE

## NGC Chromatography Systems

Catalog #	Product description	NGC Quest 10 788-0001	NGC Quest 10 Plus 788-0003	NGC Quest 100 788-0002	NGC Quest 100 Plus 788-0004	NGC Scout 10 788-0005	NGC Scout 10 Plus 788-0007	NGC Scout 100 788-0006	NGC Scout 100 Plus 788-0008	NGC Discover 10 788-0009	NGC Discover 100 788-0010	NGC Discover 10 Pro 788-0011	NGC Discover 100 Pro 788-0012
788-4002	NGC F10 pump module	●	●			●	●			●		●	
788-4003	NGC F100 pump module*			●	●			●	●		●		●
788-4018	NGC mixer module	●	●	●	●	●	●	●	●	●	●	●	●
788-4007	NGC sample inject valve module	●	●	●	●	●	●	●	●	●	●	●	●
788-4008	NGC single-wavelength detector module, includes conductivity monitor	●		●		●		●					
788-4009	NGC multi-wavelength detector module, includes conductivity monitor	○	●	○	●	○	●	○	●	●	●	●	●
788-4010	NGC buffer blending valve module	○	○	○	○	●	●	●	●	●	●	●	●
788-4011	NGC pH valve module, includes pH probe	○	○	○	○	●	●	●	●	●	●	●	●
788-4004	NGC sample pump module, integrated	○	○	○	○	○	○	○	○	●	●	●	●
788-4006	NGC inlet valve module	○	○	○	○	○	○	○	○	●	●	●	●
788-4012	NGC column switching valve module, 10 ml	○	○	○	○	○	○	○	○	●	○	●	○
788-4026	NGC column switching valve module, 100 ml	○	○	○	○	○	○	○	○	●	○	●	○
788-4013	NGC outlet valve module*	○	○	○	○	○	○	○	○	○	○	●	●
788-6000	ChromLab software	●	●	●	●	●	●	●	●	●	●	●	●

- Standard
- Optional
- \* Coming soon

**Note:** All NGC systems include a touch screen and are compatible with the BioFrac fraction collector and C-96 autosampler.



## Specifications

### System Specifications

Control system	ChromLab software 1.0 (compatible across all NGC systems)
Dimensions (W x H x D)	483 x 546 x 584 mm
Weight (excluding computer)	73 kg (NGC Quest system)– 98 kg (NGC Discover system)
Power supply	100–240 V, 50–60 Hz
Power consumption	750 W maximum

### System Pump

Pump type	Reciprocating piston
Flow rate setting	<b>10 ml/min pumps:</b> 0.001 to 10 ml/min (normal range) <b>100 ml/min pumps:</b> 0.01 to 100 ml/min (normal range)
Flow rate accuracy	±2% (conditions: 0.1 to 10 ml/min, pressure <600 psi (4.1 MPa, 41 bar), Viscosity: 0.5–3.7 cP)
Pressure range	<b>10 ml/min pumps:</b> 0 to 25.2 MPa (3,650 psi) <b>100 ml/min pumps:</b> 0 to 10 MPa (1,450 psi)
Viscosity range	0.5–10.8 cP (for 10 ml/min and 100 ml/min pumps)

### Sample Pump

Pump type	Piston pump, metering type
Flow rate setting	0.01 to 100 ml/min
Flow rate accuracy	±2%
Pressure range	0 to 10 MPa (1,450 psi)
Viscosity range	0.5–10 cP

### Mixer

Mixing principle	Chamber with magnetic stirrer
Mixer volume	263 µl (included), 750 µl (included), 2 ml, 5 ml (F10) 750 µl (included), 2 ml (included), 5 ml, 12 ml (F100)
Gradient flow rate range	0.25–10 mL/min (F10) 5–100 mL/min (F100)
Gradient composition accuracy	± 0.5% (conditions: 3 to 97% B, 0.25 to 10 ml/min F10 pumps, 0 to 3650 psi, 0.8 to 2 cP) ± 0.5% (conditions: 3 to 97% B, 0.25 to 10 ml/min F100 pumps, 0 to 1450 psi, 0.8 to 2 cP)

### Valves

Type	Rotary valves and rocker solenoid
Number of valves	Up to 12
Functions	Loop selection (PEEK loop and DynaLoop™ offerings)

### Pressure Sensors

Placement of sensors	Standard: after system pump Options: pre-column, post-column
Range	0–3,650 psi
Accuracy	±2%

### Inlet Valves

Inlet A	8 inlets
Inlet B	8 inlets
Sample inlet*	Up to 16 inlets

### UV and UV/Vis Detectors

(each includes an integrated conductivity monitor)

Wavelength	<b>Single-wavelength:</b> 255 nm (nucleic acids) or 280 nm (proteins) <b>Multi-wavelength (up to 4):</b> 190–800 nm
Absorbance range	0 to >2.8 Au
Linearity	0 to 2 Au within ±5%
Operating pressure	1,450 psi (10 MPa) for 5, 10 mm flow cells 700 psi (5 MPa) for 2 mm flow cells
Flow cells	Preparative: 2 mm (cell volume: 20 µl) Analytical: 5 mm (cell volume: 9 µl) Analytical: 10 mm (cell volume: 18 µl)

### Conductivity Monitor

Conductivity reading range	1 µS/cm–999 mS/cm
Accuracy	±2%
Operating pressure	0–5.5 MPa (800 psi)
Flow cell volume	6 µl
Temperature monitor range	4–100°C
Temperature monitor accuracy	±2%

### pH Monitor

pH reading range	0 to 14
Accuracy	±0.1 pH unit within pH 2–12
Operating pressure	0 to 70 psi with pH probe inline and 0–500 psi in bypass mode
Flow cell volume	100 µl (210 µl including internal flow paths)

### BioFrac Fraction Collector

Collection modes	Time: 0.02–99,999 min Drop: 1–99,999 drops, flow rate ≤5.0 ml/min Volume: 0.02–99,999 ml
Collection rack options	180 x 12–13 mm tubes, 120 x 15–16 mm tubes, 80 x 18–20 mm tubes, 168 x 1.5 ml microtubes, 24 x 30 mm tubes, 4 x 96, 48-, 24-, or 12-position microplates, and 20 x unlimited preparative volumes adaptor
Operating temperature	4–40°C
Dimensions (W x D x H)	44.5 x 35.6 x 38.7 cm
Safety	Meets IEC 61010 and CSA 22.2 certification

### Column Switching

Five-column valve	Can hook up to 5 columns or go to bypass
-------------------	--

### Buffer Blending

Standard in the NGC Scout and Discover Discover systems

### Air Sensor Module

Number of sensors	Up to 8 total air sensors (1 for end of sample detection, remaining are buffer)
Placement of built-in sensors	End of buffer, end of sample
Sensing principle	Acoustic

**Note:** All NGC systems include a touch screen and are compatible with the BioFrac fraction collector and C-96 autosampler.

\* Coming soon.

## Ordering Information

### NGC Medium-Pressure Chromatography Systems

#### NGC Quest Chromatography Systems

For the all-purpose purification of biomolecules

788-0001	NGC Quest 10 System
788-0003	NGC Quest 10 Plus System
788-0002	NGC Quest 100 System
788-0004	NGC Quest 100 Plus System

#### NGC Scout Chromatography Systems

For rapid scouting of biomolecules

788-0005	NGC Scout 10 System
788-0006	NGC Scout 100 System

For rapid scouting of proteins, peptides, and nucleic acids

788-0007	NGC Scout 10 Plus System
788-0008	NGC Scout 100 Plus System

#### NGC Discover Chromatography Systems

For method development

788-0001	NGC Discover 10 System
788-0003	NGC Discover 100 System

### NGC System Modules and Accessories

#### System Pumps

788-4002	<b>NGC F10 Pump Module</b> , pkg of 1, includes 10 ml/min system pump kit with necessary tubing and fittings, for creating buffer gradients, for use with the buffer blending valve to generate flow rates of up to 20 ml/min
788-4003	<b>NGC F100 Pump Module</b> , pkg of 1, includes 100 ml/min system pump kit with necessary tubing and fittings, for creating buffer gradients, for use with the buffer blending valve to generate flow rates of up to 200 ml/min

#### Sample Pump

788-4004	<b>NGC Sample Pump 100 Module</b> , pkg of 1, includes 100 ml/min sample pump kit with necessary tubing and fittings, for automated large-volume sample application via sample inject valve
----------	---

#### Detectors

788-4008	<b>NGC Single-Wavelength Detector Module</b> , pkg of 1, includes UV/conductivity detector with necessary tubing and fittings, for nucleotide and protein detection, salt gradient generation
788-4009	<b>NGC Multi-Wavelength Detector Module</b> , pkg of 1, includes UV/Vis and conductivity detector kit with necessary tubing and fittings, for simultaneous four-wavelength monitoring of elution fractions between 190–800 nm and salt gradient generation

#### Mixer

788-4018	<b>NGC Mixer Module</b> , pkg of 1, can be extended with 2, 5, and 12 ml barrels for efficient gradient mixing at higher flow rates, for use with all NGC systems, does not include mixer base or barrels
788-4019	<b>NGC F100 Mixer</b> , pkg of 1, 750 µl base and top assembly, included with all 100 ml/min NGC systems
788-4020	<b>NGC F10 Mixer</b> , pkg of 1, 263 µl base and top assembly, included with all 10 ml/min NGC systems
788-4021	<b>NGC F10 Mixer Barrel Kit</b> , pkg of 1, 750 µl extension barrel for F10 263 µl mixer, part of NGC Scout 10, NGC Discover 10 series
788-4022	<b>NGC F10 Mixer Barrel Kit</b> , pkg of 1, 2 ml extension barrel for F10 263 µl mixer, optional part
788-4028	<b>NGC F100 Mixer Barrel Kit</b> , pkg of 1, 2 ml extension barrel for F100 750 µl mixer, part of NGC Scout 100, NGC Discover 100 series
788-4023	<b>NGC F100 Mixer Barrel Kit</b> , pkg of 1, 5 ml extension barrel for F100 750 µl mixer, optional part
788-4024	<b>NGC F100 Mixer Barrel Kit</b> , pkg of 1, 12 ml extension barrel for 750 µl mixer, optional part

#### Valves

788-4007	<b>NGC Sample Inject Valve</b> , pkg of 1, kit includes necessary tubing, fittings, and sample injection port, for manual sample application of small-volume samples via sample loops or large-volume samples using a sample pump
788-4010	<b>NGC Buffer Blending Valve Module</b> , pkg of 1, kit includes necessary tubing and fittings, for inline buffer preparation and generating pH gradients for quick pH scouting
788-4006	<b>NGC Inlet Valve Module</b> , pkg of 1, kit includes necessary tubing and fittings, for automated switching between multiple buffers and samples during method development
788-4012	<b>NGC Column Switching Valve Module (10 ml)</b> , kit includes the necessary tubing and fittings to accommodate the most common column types, holds 5 columns, for use with F10 systems and multiple columns for quick column scouting and reverse flow
788-4026	<b>NGC Column Switching Valve Module (100 ml)</b> , kit includes the necessary tubing and fittings to accommodate the most common column types, holds 5 columns, for use with F100 systems and multiple columns for quick column scouting and reverse flow

#### Air Sensor

788-4017	<b>NGC Air Sensor Module</b> , pkg of 1, kit includes 2 large-bore air sensors to protect against air entering pumps and columns, supports up to 4 large- and small-bore air sensors, for detection of end of buffer and sample
788-5018	<b>NGC Air Sensor Extension Module</b> , pkg of 1, connects to the base air sensor module to support 4 additional air sensors, does not include any air sensors, optional part
788-5020	<b>NGC Air Sensor (small)</b> , pkg of 1, includes air sensor to exclude air from system and columns, detects air in small-diameter PEEK tubing
788-5021	<b>NGC Air Sensor (large)</b> , pkg of 1, includes air sensor to exclude air from system and columns, detects air in large-diameter tubing
788-5019	<b>NGC Air Sensor Extension Cable</b> , pkg of 1, for placement of air sensors outside air sensor module

#### Fraction Collector and Autosampler

741-0002	<b>BioFrac Fraction Collector</b> , 100/240 V, fraction collector compatible with all NGC systems, includes power cord, rack set F1 (2 x flatpack, 13 mm), BioFrac diverter valve, fittings kit
788-4025	<b>NGC Communication Adaptor</b> , pkg of 1, enables communication with Bio-Rad devices, such as the BioFrac fraction collector (#741-0002), with the NGC system
788-5011	<b>C-96 Autosampler</b> , 110-240 V, includes standard 84+3 vial tray (1.5 and 10 ml), control cable set to connect with NGC system, 1 ml syringe, 2 ml sample loop, also includes #760-5014, #760-5026, #760-0604, #788-4016, and #788-5013, compatible with all NGC systems
788-5012	<b>C-96 Autosampler with cooling</b> , 110-240 V, includes Peltier cooling, includes standard 84+3 vial tray (1.5 and 10 ml), control cable set to connect with NGC system, 1 ml syringe, 2 ml sample loop, also includes #760-5014, #760-5026, #760-0604, #788-4016, and #788-5013, compatible with all NGC systems

ÅKTA, ÅKTApurifier, and Superdex are trademarks of GE Healthcare group companies.

PEEK is a trademark of Victrex PLC.



**Bio-Rad  
Laboratories, Inc.**

Life Science  
Group

**Web site** [www.bio-rad.com](http://www.bio-rad.com) **USA** 800 424 6723 **Australia** 61 2 9914 2800 **Austria** 01 877 89 01 **Belgium** 09 385 55 11 **Brazil** 55 11 5044 5699  
**Canada** 905 364 3435 **China** 86 21 6169 8500 **Czech Republic** 420 241 430 532 **Denmark** 44 52 10 00 **Finland** 09 804 22 00  
**France** 01 47 95 69 65 **Germany** 089 31 884 0 **Greece** 30 210 9532 220 **Hong Kong** 852 2789 3300 **Hungary** 36 1 459 6100 **India** 91 124 4029300  
**Israel** 03 963 6050 **Italy** 39 02 216091 **Japan** 03 6361 7000 **Korea** 82 2 3473 4460 **Mexico** 52 555 488 7670 **The Netherlands** 0318 540666  
**New Zealand** 64 9 415 2280 **Norway** 23 38 41 30 **Poland** 48 22 331 99 99 **Portugal** 351 21 472 7700 **Russia** 7 495 721 14 04  
**Singapore** 65 6415 3188 **South Africa** 27 861 246 723 **Spain** 34 91 590 5200 **Sweden** 08 555 12700 **Switzerland** 061 717 95 55  
**Taiwan** 886 2 2578 7189 **Thailand** 800 88 22 88 **United Kingdom** 020 8328 2000