



*Sepax Technologies*

## SCG™ Protein Purification System



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## An Excellent Performance Purification System

- Equipped with high performing binary pumps that can operate under high system pressure (1500 PSI for SCG-100 and 4000 PSI for SCG-030)
- Furnished with DAD detector that provides output of up to 4 wavelengths simultaneously
- Accompanied with PH/Conductivity detector to monitor the gradient in real time
- Made of biologically inert materials (such as peak) in the entire flow pass
- Workstation interface is concise and easy to use for system control and data process

### Outstanding Stability and Reliability

Equipped with high performing binary pumps that can operate under high system pressure (1500 PSI for SCG-100 and 4000 PSI for SCG-030). It can also provide stable separation under low temperature or low pressure.

### High Accuracy and Reproducibility

The SCG pump is made with a pulse compensation technology, which makes the system with great gradient accuracy and repeatability.

### Easier to Identify Multiple Sample Fractions

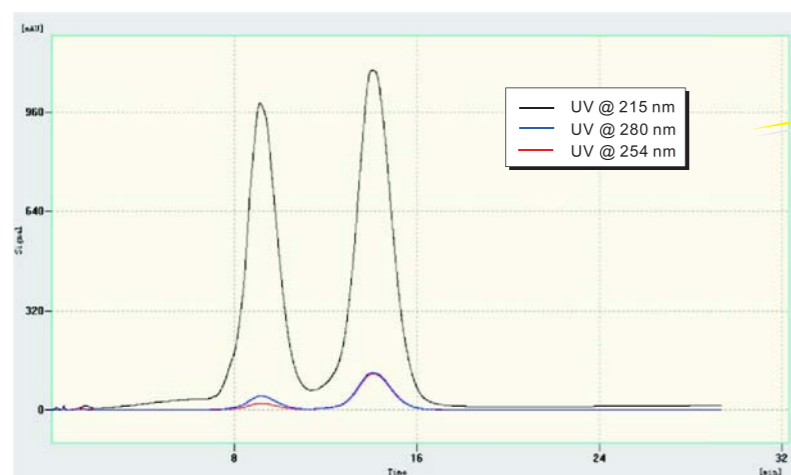
SCG DAD detector provide up to 4 wavelength signals output, makes it easier to detect different sample fractions.

### Precisely Monitor Gradient Environment During Elution

Provide real time monitor of pH and electric conductivity with SCG pH/ Electric Conductivity Detector, able to use temperature compensation to obtain a precise value of pH and electric conductivity.

### Easily Software Operation

The workstation interface is concise and easy to use. Multi-channel data acquisition can be achieved with the frequency up to 20/s, and the data can be analysed on real time.



Easy to monitor purity on multi-wavelength signals

■ Separation of Ribonuclease A and Cytochrome C on a IEX Column

Buffer A: 30 mM PBS, pH 7.5; Buffer B: A + 1 M NaCl;  
Flow rate: 10 ml/min  
Gradient: 0 - 40 ml, 100%A, 40 - 340 ml, 0 - 50%B

## Columns for Protein Purification

### Dimensions

ID(mm)	Length(mm)	Volume(L)	ID(mm)	Length(mm)	Volume(L)
5.0	20-600	0.4-12	50	200	0.39
11.3	20-600	2.0-60	80	200	1.0
16	20-600	4.0-120	100	200	1.25
25	20-600	10-295	200	200	7.5
			300	200	17.5

### Packing

Packing	Mode	Particle Size	Matrix
MabPurix Protein A	Affinity	85µm(40-130µm)	4% cross linked Agarose
Generik MC-SP	Strong Cation Exchange	30, 60µm	Polymethacrylate
Generik MC-Q	Strong Anion Exchange	30, 60µm	Polymethacrylate
Generik MC-CM	Weak Cation Exchange	30, 60µm	Polymethacrylate
Generik MC-DEAE	Weak Anion Exchange	30, 60µm	Polymethacrylate
Agarosix-SP	Strong Cation Exchange	90µm(45-165µm)	6% cross linked Agarose
Agarosix-Q	Strong Cation Exchange	90µm(45-165µm)	6% cross linked Agarose
Agarosix-CM	Weak Anion Exchange	90µm(45-165µm)	6% cross linked Agarose
Agarosix-DEAE	Weak Anion Exchange	90µm(45-165µm)	6% cross linked Agarose

## Technical Specifications

	SCG-030	SCG-100	
<b>Pump</b>	Flow rate	36 mL/min(MAX.)	100 mL/min(MAX.)
	Flow rate accuracy	± 2%	± 2%
	Flow rate repeatability	RSD < 0.5%	RSD < 0.5%
	Pressure	4000 psi	1500 psi
	Gradient	Binary	Binary
<b>Detector</b>	Wavelength Range	200 ~ 600 nm	
	Wavelength Accuracy	± 1 nm	
	Wavelength repeatability	± 0.5 nm	
	Noise	± 5 × 10 <sup>-5</sup> AU(0.75 s)	
	Drift	1 × 10 <sup>-3</sup> /hr	
	Output	4 wavelengths output	
<b>Injector</b>	Auto Injector or Manual Injector (loop with 0.02 – 1.0 ml and customer-specific loop)		
<b>pH/ Electric Conductivity Detector</b>	pH Range/ Accuracy	pH 0 - 14 / ± 0.02	
	Electric Conductivity Range/ Accuracy	0.002 - 200 mS/cm / ± 2%	
	Temperature Range/ Accuracy	2 - 50°C / ± 1°C	