



Life Science Research  
Protein Purification



# Protein Purification



## Description

Analysis of crude protein extract

Lysis, solubilization, clarification, and fractionation of sample

Analysis of refined protein sample

## Applications

- Purification from native secreted protein
- Purification from native intracellular protein
- Purification from recombinant secreted protein
- Purification from recombinant intracellular protein



## Technologies

Automated protein electrophoresis  
 Protein electrophoresis  
 Protein blotting  
 Image analysis  
 Spectrophotometry and fluorometry  
 Protein assays

Protein sample preparation

Automated protein electrophoresis  
 Protein electrophoresis  
 Protein blotting  
 Image analysis  
 Spectrophotometry and fluorometry  
 Protein assays

## Related Products



Experion™ automated electrophoresis system  
 Mini-PROTEAN® Tetra cell  
 Criterion™ cell and precast gels  
 Flamingo™ fluorescent gel stain  
 Molecular Imager® Gel Doc™ XR system  
 Molecular Imager® ChemiDoc™ XRS system  
 SmartSpec™ Plus spectrophotometer  
 RC DC™ protein assay



ReadyPrep™ protein extraction kits  
 ReadyPrep sequential extraction kit  
 MicroRotofor™ cell



Flamingo fluorescent gel stain  
 SmartSpec Plus spectrophotometer  
 RC DC protein assay  
 Molecular Imager Gel Doc XR system



Purification of a specific protein or protein family of interest

Assessment of purified protein(s) for quality and quantity

For over half a century, Bio-Rad has provided life science researchers performing protein purification and separation a complete set of easy-to-use, flexible, modular tools that deliver efficient, convenient, and reproducible results.

Bio-Rad offers a complete line of laboratory-scale chromatography instruments, columns, and media that are flexible, upgradable, and easy to use. From automated purification to reliable low-pressure systems, Bio-Rad provides a solution for each phase of purification — capture, intermediate, and polishing — and manufactures media for any scale, from nanograms to kilograms. Visit us on the Web at [www.bio-rad.com/chromsystems/](http://www.bio-rad.com/chromsystems/)

**Recombinant**

Automated affinity chromatography  
Tagged protein purification

**Native**

Preparative electrophoresis  
Ion exchange chromatography  
Hydroxyapatite and affinity chromatography  
Size exclusion chromatography

Automated protein electrophoresis  
Protein electrophoresis  
Protein blotting  
Image analysis  
Spectrophotometry and fluorometry  
Protein assays



Profinia™ protein purification system  
Profinity™ IMAC and GST resins  
UNOsphere™ Q support  
Chelex® 100 resin  
Bio-Gel® HT and HTP hydroxyapatite  
CHT™ ceramic hydroxyapatite  
Econo-Pac® protein A columns  
Econo-Column® columns  
BioLogic™ LP system  
Model 491 prep cell

Experion automated electrophoresis system  
Experion Pro260 analysis kit  
Mini-PROTEAN Tetra cell and Ready Gel® precast gels  
Criterion blotter  
PowerPac™ Universal power supply  
SmartSpec Plus spectrophotometer

## Protein Purification

Sample > Sample Assessment > Sample Preparation > Sample Assessment > Purification > Sample Assessment > Purified Protein

For a complete list of products and related product information, refer to the 2006/2007 catalog, visit us on the Web at [www.bio-rad.com](http://www.bio-rad.com), or contact your local Bio-Rad representative.

### Ordering Information

Catalog #	Description	Catalog #	Description
<b>Sample Assessment</b>		<b>Purification</b>	
700-7060	<b>Experion System With Dell Computer and Monitor</b> , for protein analysis (analysis kits sold separately)	620-1009	<b>Profinia Protein Purification System</b> , includes cleaning tray, inline filter pack, 2 x 50 ml sample lids, 2 x 15 ml sample lids, bottle starter pack, waste/diluent bottle set, with Profinia software
700-7102	<b>Experion Pro260 Analysis Kit for 25 Chips</b> , includes 25 Pro260 chips, Experion Pro260 reagents and supplies for 25 chips	156-0121	<b>Profinity IMAC Uncharged Resin</b> , 10 ml
165-8000	<b>Mini-PROTEANTetra Cell</b> , 10-well, 0.75 mm thickness; 4-gel system	156-0131	<b>Profinity IMAC Ni-Charged Resin</b> , 10 ml
Varies	<b>Ready Gel Precast Gels</b>	732-4612	<b>Bio-Scale Mini Profinity IMAC Cartridge</b> , 1 x 5 ml
165-6001	<b>CriterionCell</b>	732-4622	<b>Bio-Scale Mini Profinity GST Cartridge</b> , 1 x 5 ml
Varies	<b>CriterionTris-HCl Gels</b>	156-0105	<b>UNOsphere Q Support</b> , 500 ml
Varies	<b>CriterionTris-Tricine Gels</b>	142-2825	<b>Chelex 100 Resin</b> , 100 g
165-6024	<b>Criterion Cell/Plate Blotter System</b> , includes Criterion cell and Criterion blotter with plate electrodes	130-0150	<b>Bio-Gel HT Hydroxyapatite</b> , hydrated, 250 ml
164-5070	<b>PowerPac Universal Power Supply</b>	130-0420	<b>Bio-Gel HTP Hydroxyapatite</b> , powder, 100 g
161-0491	<b>Flamingo Fluorescent Gel Stain</b> , 10x solution, 100 ml	130-0520	<b>Bio-Gel HTP Hydroxyapatite</b> , DNA grade, 100 g
161-0787	<b>Bio-Safe™ Coomassie Stain</b> , 5 L	158-2000	<b>CHT Ceramic Hydroxyapatite</b> , 20 µm, Type I, 10 g
170-8170	<b>MolecularImager Gel Doc XR System</b> , PC, includes Quantity One software	158-2200	<b>CHT Ceramic Hydroxyapatite</b> , 20 µm, Type II, 10 g
170-8171	<b>MolecularImager Gel Doc XR System</b> , Mac, includes Quantity One software	Varies	<b>Bio-Gel P Polyacrylamide Gels</b>
170-8650	<b>Molecular Imager® VersaDoc™ MP 5000 System</b> , PC or Mac, includes Quantity One software	732-2022	<b>Econo-PacProtein A Columns</b> , prefilled with Affi-Gel protein A gel, 5
170-8070	<b>Molecular Imager ChemiDoc XRS System</b> , PC, includes Quantity One software	732-1010	<b>Econo-PacChromatography Columns</b> , empty, 50
170-8071	<b>Molecular Imager ChemiDoc XRS System</b> , Mac, includes Quantity One software	732-1011	<b>Econo-PacChromatography Columns</b> , empty, 500
170-2525	<b>SmartSpec Plus Spectrophotometer</b>	Varies	<b>Econo-Column Chromatography Columns</b>
170-2402	<b>VersaFluor Fluorometer</b>	760-0038	<b>BioLogic DuoFlow 10 System</b> , 100/120 V, includes Dell controller and monitor, USB Bitbus communicator, F10 workstation, MX-1 mixer, 3-tray rack, AVR7-3 sample inject valve, fittings kit, UV detector with 5 mm flow cell and 254/280 nm filters, conductivity monitor, starter kit, UNO Q1 column, instructions
500-0121	<b>RC DC Protein Assay Kit I</b> , includes RC reagents package, DC protein assay reagents package, bovine γ-globulin standard; 450 standard assays	731-8300	<b>BioLogic DuoFlow 10 System</b> , 220/240 V
<b>Sample Preparation</b>			<b>StandardBioLogic LP System</b> , 100/120 V, includes BioLogic LP controller, BioLogic rack, accessory kit with inject valve (MV-6), proportioning valve/mixer, UV optics, conductivity cell, tubing and fittings kit, column and conductivity cell holder, starter kit, instructions
163-2086	<b>ReadyPrep Protein Extraction Kit (Total Protein)</b> , 20 preps	731-8301	<b>Standard BioLogic LP System</b> , 220/240 V
163-2089	<b>ReadyPrep Protein Extraction Kit (Cytoplasmic/ Nuclear)</b> , 50 preps	170-2926	<b>Model491 Prep Cell</b> , 100/120 V
163-2100	<b>ReadyPrepSequential Extraction Kit</b> , 5–15 preps	170-2927	<b>Model491 Prep Cell</b> , 220/240 V
163-2141	<b>MicroRotorforCell Lysis Kit (Mammal)</b> , 15 preps	170-2908	<b>Mini Prep Cell Without Reagent Starter Kit</b>
163-2142	<b>MicroRotorforCell Lysis Kit (Plant)</b> , 10 preps	170-2915	<b>Mini Prep Cell With Reagent Starter Kit</b>
163-2143	<b>MicroRotorforCell Lysis Kit (Yeast)</b> , 15 preps		
163-2144	<b>MicroRotorforCell Lysis Kit (Bacteria)</b> , 15 preps		
170-2800	<b>MicroRotorforCell Kit</b> , 100/120 V		
170-2801	<b>MicroRotorfor Cell Kit</b> , 220/240 V		
170-2802	<b>MicroRotorforSystem</b> , 100/120 V, includes kit with PowerPac HV power supply		
170-2803	<b>MicroRotorforSystem</b> , 220/240 V, includes kit with PowerPac HV power supply		

Coomassie is a trademark of BASF Aktiengesellschaft.



LabChip and the LabChip logo are trademarks of Caliper Life Sciences, Inc. Bio-Rad Laboratories, Inc. is licensed by Caliper Life Sciences, Inc. to sell products using the LabChip technology for research use only.

Purification of fusion proteins may require a license from third parties.

**BIO-RAD**

**Bio-Rad  
Laboratories, Inc.**

Life Science  
Group

Web site [www.bio-rad.com](http://www.bio-rad.com) USA 800 4BIORAD Australia 61 02 9914 2800 Austria 01 877 89 01 Belgium 09 385 55 11 Brazil 55 21 3237 9400 Canada 905 712 2771 China 86 21 6426 0808 Czech Republic 420 241 430 532 Denmark 44 52 10 00 Finland 09 804 22 00 France 01 47 95 69 65 Germany 089 318 84 0 Greece 30 210 777 4396 Hong Kong 852 2789 3300 Hungary 36 1 455 8800 India 91 124 4029300 Israel 03 963 6050 Italy 39 02 216091 Japan 03 5811 6270 Korea 82 2 3473 4460 Mexico 52 555 488 7670 The Netherlands 0318 540666 New Zealand 0508 805 500 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 United Kingdom 020 8328 2000