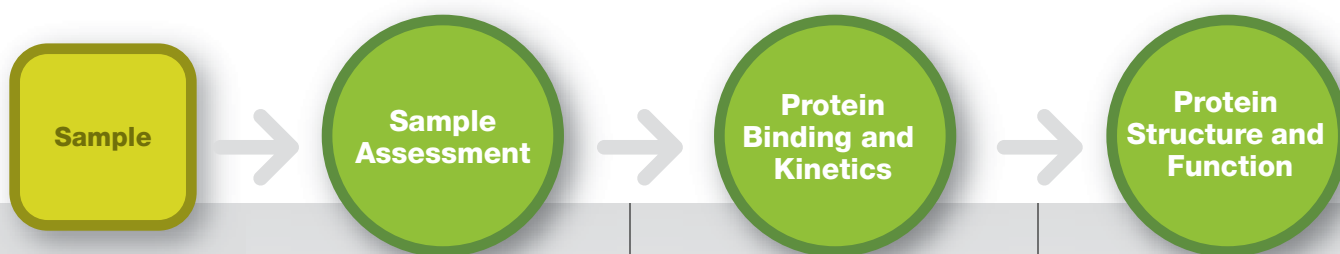







Life Science Research
Protein Interaction Analysis



Protein Interaction Analysis



	Sample Assessment	Protein Binding and Kinetics	Protein Structure and Function
Description	Assessment of protein purity and quantity, as well as protein characterization	Determination of protein binding characteristics and kinetic properties	Further protein analysis, including structural and functional analysis
Applications	●	●	●
Mutation analysis	●	●	●
Protein interface mapping	●	●	●
Antibody characterization	●	●	●
Drug development	●	●	●
Signal transduction pathway elucidation	●	●	●
Technologies	Automated protein electrophoresis Protein electrophoresis Protein blotting Image analysis Spectrophotometry and fluorometry Protein assays	Protein sample preparation Preparative electrophoresis Quantitative PCR (qPCR) Protein interaction analysis Automated affinity chromatography Tagged protein purification Ion exchange chromatography Hydroxyapatite and affinity chromatography Size exclusion chromatography Microarray analysis Multiplex suspension array technology — protein Mutation analysis	Automated affinity chromatography Tagged protein purification Ion exchange chromatography Hydroxyapatite and affinity chromatography Size exclusion chromatography Protein electrophoresis Protein blotting Image analysis Quantitative PCR (qPCR)
Related Products	 <p>Experion™ automated electrophoresis system Criterion™ cell and precast gels Criterion blotter PowerPac™ Universal power supply Molecular Imager® VersaDoc™ MP 4000 system</p>	 <p>ReadyPrep™ 2-D cleanup kit ReadyPrep sequential extraction kit Model 491 prep cell MiniOpticon™ real-time PCR system iQ™5 real-time PCR system ProteOn™ XPR36 protein interaction array system Profinia™ protein purification system Profinity™ IMAC and GST resins</p>	 <p>Profinia protein purification system UNOsphere™ Q support Bio-Gel™ HT and HTP hydroxyapatite CHT™ ceramic hydroxyapatite Criterion cell and precast gels Mini-PROTEAN® Tetra cell PowerPac Basic power supply Molecular Imager VersaDoc MP 4000 system</p>



Profiling and identification of proteins

Validation of the biological role

Protein Kinetics

Proteins play a crucial role in cellular structure and function. The search, discovery, and characterization of proteins is the first step in understanding how each protein participates in a biological process. The next logical step is to understand how a protein functions: What binding patterns exist? Is this protein involved in a network? How does one protein interface with another? What are the binding dynamics?

The ProteOn XPR36 system bridges the gap between discovery and function, providing the ability to understand protein interactions with the efficiency, flexibility, and versatility of parallel processing.

Bio Rad provides the most accessible high-throughput tools for multiplexing to provide protein function researchers with rapid and consistent results from the biophysical characterization of a protein to defining its biological role.

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- Surface-enhanced laser desorption/ionization (SELDI)
Liquid chromatography-tandem mass spectrometry (LC-MS/MS)

- -
 -
- Protein electrophoresis
Protein blotting
Image analysis
Isoelectric focusing
Lipid-mediated transfection
Electroporation
Data analysis and bioinformatics



ProteinChip® SELDI system



PROTEAN® IEF system
Criterion cell and precast gels
Molecular Imager® PharosFX™ system
siLentFect™ lipid reagent for RNAi
TransFectin™ lipid reagent
Gene Pulser Xcell™ total system
Gene Pulser®/MicroPulser™ cuvettes

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, or contact your local Bio-Rad representative.

Ordering Information

Catalog #	Description
Sample Assessment	
700-7000	ExperionSystem , for protein analysis (analysis kits sold separately)
165-6001	CriterionCell
Varies	CriterionTris-HCl Gels
170-4071	CriterionBlotter With Wire Electrodes
170-4070	CriterionBlotter With Plate Electrodes
164-5070	PowerPacUniversal Power Supply
170-8640	Molecular Imager VersaDoc MP 4000 System , PC or Mac, includes CCD camera, darkroom, power supply, cables, epi-illumination, transillumination, fluorescent reference plate, focusing target, Quantity One software, instructions
170-2525	SmartSpec Plus Spectrophotometer
170-2402	VersaFluor Fluorometer
500-0205	Quick Start™ Bradford 1x Dye Reagent, 1 L
Protein Binding and Kinetics	
163-2130	ReadyPrep 2-D Cleanup Kit , 50 preps
163-2100	ReadyPrepSequential Extraction Kit , 5–15 preps
170-2926	Model491 Prep Cell , 100/120 V
170-2927	Model 491 Prep Cell , 220/240 V
170-2800	MicroRotorforCell Kit , 100/120 V
170-2801	MicroRotorfor Cell Kit , 220/240 V
170-2802	MicroRotorforSystem , 100/120 V, includes kit with PowerPac HV power supply
170-2803	MicroRotorforSystem , 220/240 V, includes kit with PowerPac HV power supply
CFB-3120	MiniOpticon Real-Time PCR System , includes optical housing, MJ Mini thermal cycler, analysis software
170-9780	iQ5Multicolor Real-Time PCR Detection System , includes iCycler base, optics module, software CD-ROM, 5 installed filter sets, 96-well reaction module, calibration solutions, optical-quality 96-well PCR plates, Microseal 'B' seals, communication cables, power cord, quick reference cards, instructions
176-0100	ProteOnXPR36 Protein Interaction Array System
176-5011	ProteOn GLC Sensor Chip
176-5012	ProteOn GLM Sensor Chip
176-5021	ProteOn NLC Sensor Chip
176-1010	ProteOn One-Shot Kinetics Kit
176-1020	ProteOnMultiple Protein Interaction Kit
176-1030	ProteOn Protein-Small Molecule Kit
620-1009	ProfiniaProtein Purification System , 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, Profinia software
156-0121	Profinity IMAC Uncharged Resin , 10 ml
156-0131	Profinity IMAC Ni-Charged Resin , 10 ml
732-4612	Bio-Scale Mini Profinity IMAC Cartridge , 1 x 5 ml
732-4622	Bio-Scale Mini Profinity GST Cartridge , 1 x 5 ml

Catalog #	Description
169-2000	BioOdyssey Calligrapher MiniArrayer , 115 V
169-2100	BioOdyssey Calligrapher MiniArrayer , 230 V
171-000201	Bio-Plex 200 System
171-000205	Bio-Plex200 System With HTF , includes high-throughput fluidics
Varies	DCode System for DGGE
Protein Structure and Function	
732-4100	UNOsphere Q Bio-Scale Mini Q Cartridges , 5 x 1 ml
130-0150	Bio-Gel HT Hydroxyapatite , hydrated, 250 ml
158-2000	CHT Ceramic Hydroxyapatite , Type I, 20 µm, 10 g
165-8031	Mini-PROTEAN Tetra Cell and Mini Trans-Blot Cell
164-5050	PowerPac Basic Power Supply
Protein Profiling and Quantitation	
Z50-00011	ProteinChip SELDI System , Enterprise Edition, 115 V
Z50-00013	ProteinChip SELDI System , Personal Edition, 115 V
Z50-00021	ProteinChip SELDI System , Enterprise Edition, 230 V
Z50-00023	ProteinChip SELDI System , Personal Edition, 230 V
Varies	ProteinChip Arrays
Varies	ProteinChip Energy Absorbing Molecules (EAMs)
C10-00001	ProteinChip Protein Calibrant Kit
C10-00002	ProteinChip Peptide Calibrant Kit
Validation	
165-4000	PROTEANIEF System , 90–240 VAC
170-9460	Molecular Imager PharosFX Plus System , PC or Mac, includes Quantity One software
170-3360	siLentFect Lipid Reagent for RNAi , 0.5 ml
170-3350	TransFectin Lipid Reagent , 0.5 ml
165-2660	GenePulser Xcell Total System , for mammalian and microbial cells
165-2088	Gene Pulser/MicroPulser Cuvettes , 0.4 cm gap, 50
170-9300	FPQuest™ Software
Varies	InfoQuest™ FP Software

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Bio-Rad's real-time thermal cyclers are licensed real-time thermal cyclers under Applera's United States Patent No. 6,814,934 B1 for use in research and for all other fields except the fields of human diagnostics and veterinary diagnostics.

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

The SELDI process is covered by U.S. Patents 5,719,060, 6,225,047, 6,579,719, 6,818,411 and other issued patents and pending applications in the U.S. and other jurisdictions.



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