

Tools for Protein Research

2008/09



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PATH® Protein Microarray Slides — Page 3

- Dependable protein microarray surface for multiplex immunoassays
- Ultra-thin nitrocellulose film binds antibodies irreversibly to the slide



DUALhunter Protein Interaction Detection Kit — Page 11

- Find novel interaction partners for transcriptionally active proteins
- Includes a reporter strain with improved stringency to result in fewer false positives



Dip-N-Blots™ Pre-Run Western Blot Strips — Page 5

- Simplified protein analysis or antibody characterization experiments
- Align the strip to the marker key to determine the molecular weight of your target

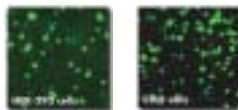
Dip-N-Spots™ Pre-Run Protein Array Strips

- Array strips for human cancer, normal tissues and cell lysates
- Solution for rapid biomarker and differential expression analysis



Protino® Protein Purification Products — Page 14

- Easy purification of GST- or His-tag proteins
- Affinity chromatography
- High purity results



Fecturin™ Protein production in serum free media — Page 9

- High levels of recombinant proteins in less than 1 week
- Versatile: efficient in synthetic media for HEK293 and CHO
- Guaranteed free of animal-origin material



Protease™ Protease Inhibitor Cocktails — Page 13

- Optimized concentrations of various protease inhibitors
- Greater than 90% inhibition
- Designed for large sample volumes



Technical Support

Our friendly and knowledgeable Technical Support Specialists are available to offer assistance with everything from product selection to protocol optimization and troubleshooting.



Crystalstar™ Protein Crystallization Plates — Page 18

- Designed for high-throughput crystallization
- Products for vapor diffusion and microbatch

GENTEL BIOSCIENCES PATH® PROTEIN MICROARRAY SLIDES

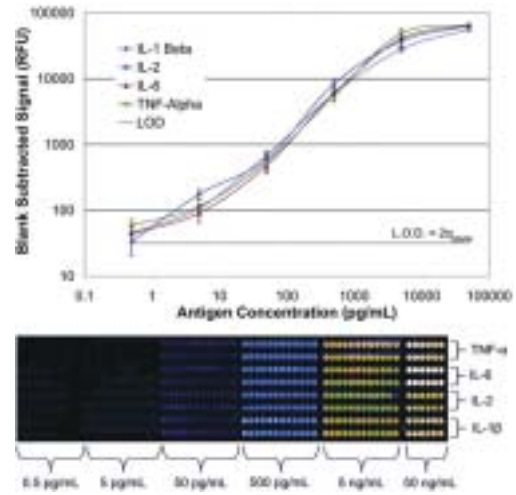


PATH® Protein Microarray Slides deliver the highest signal to noise ratios for protein microarray applications. PATH® is engineered with a proprietary ultra-thin nitrocellulose film that binds antibodies irreversibly to the slide. Antibodies immobilized on a PATH® array slide retain their antigen binding activity and yield exceptional immunoassay sensitivity with up to five logs of dynamic range. PATH® Protein Microarray Kits combine PATH technology with high-quality reagents specifically designed for protein microarray applications.

Applications of PATH® Protein Microarray Slides:

- Quantitative multiple immunoassays
- Single capture antibody arrays
- Multiplex serological assays
- Biomarker profiling

Specifications	PATH® Slide	PATH®plus Slide
Slide Dimensions	75 x 25 x 1mm (barcoded)	75 x 25 x 1mm (non- barcoded)
Nitrocellulose Thickness	500 nM	500 nM
Usable Surface Area	58 x 21 mm	71 x 21 mm



Four to five logs of dynamic range on PATH® slides.

Cytokine specific mouse monoclonal antibodies were arrayed on the PATH® slide. Sandwich immunoassays were performed using a dilution series of purified antigen, followed by addition of detector antibody and then measured upon addition of CY-3 labeled streptavidin. Arrays were scanned using a ScanArray 4000 (PerkinElmer)

Product Number	Description	Pkg Size	Price
GT21005	PATH® Protein Microarray Slides	5	\$159.00
GT21025	PATH® Protein Microarray Slides	25	749.00
GT21105	PATH®plus Protein Microarray Slides	5	219.00
GT21125	PATH®plus Protein Microarray Slides	25	999.00
GT21003	PATH® Protein Microarray Starter Kit (includes buffers)	2	199.00
GT21001	PATH® Protein Microarray Kit (includes buffers)	10	499.00
GT21103	PATH®plus Protein Microarray Starter Kit (includes buffers)	2	279.00
GT21101	PATH®plus Protein Microarray Kit (includes buffers)	10	689.00

GENTEL BIOSCIENCES SIMplex™ MULTI ARRAY SYSTEMS

Multiplexing system to process multiple arrays using one PATH®plus slide

- Leak-proof microarray separation
- SIMplex™ 16 offers increased throughput to process 16 samples simultaneously
- SIMplex™ 64 holds up to 4 PATH®plus slides for processing 64 samples in parallel
- Maintains integrity of PATH® ultra-thin nitrocellulose film
- Compatible with multi-channel pipettors

Product Number	Description	Pkg Size	Price
GT41001	SIMplex™ 16 Multi Array System	1	\$199.00
GT41025	SIMplex™ 64 Multi Array System	1	399.00

GENTEL BIOTECHNOLOGIES APiX™ CANCER BIOMARKER ARRAY KIT, 1 Colour

The APiX™ Cancer Biomarker Array Kit, 1 Colour measures the relative abundance of 47 human cancer-related proteins in 8 serum samples simultaneously. This single-capture antibody array and protein labeling system is validated to show the detectable and specific capture of target proteins in serum to ensure that you obtain reliable results.

- Reliable profiling data of 47 cancer proteins per serum sample
- Complete kit with a pre-printed, pre-blocked array and labeling reagents
- Cost-effective per sample processing
- Compatibility with standard microarray scanners

Product Number	Description	Pkg Size	Price
GT81001	APiX™ Cancer Biomarker Array Kit, 1 Colour (8 samples/array)	Each	\$1,300.00

PROTEIN MICROARRAYS

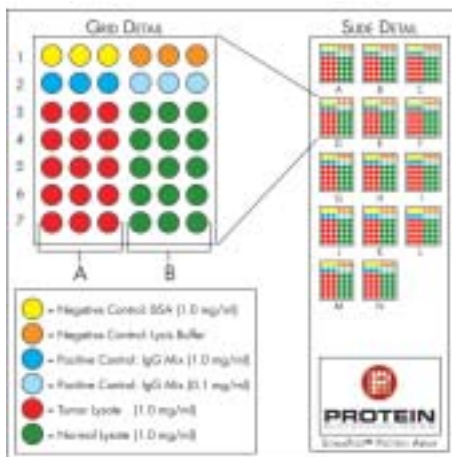
PROTEIN BIOTECHNOLOGIES SomaPlex™ PROTEIN MICROARRAYS

To facilitate high-throughput screening of human clinical specimens, Protein Biotechnologies provides its tissue lysate library on ready-to-use protein microarrays. These microarrays promise to dramatically increase the efficiency and speed of research studies by permitting the end user to assay 100+ clinical samples in a single assay.

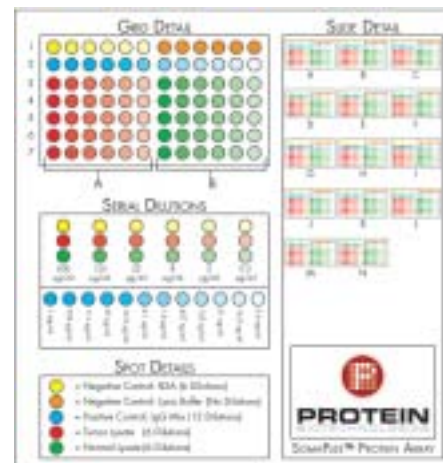
- Standard microarray slide format with single well
- Small incubation volume (600 µL)
- Available in qualitative and quantitative analysis formats
- Rapid assay time (~4-5 hours using primary and labeled secondary antibodies)
- Optimized microarray buffers and secondary antibodies reduce or eliminate background staining
- Compatible with colourimetric, chemiluminescent and fluorescent detection systems



SomaPlex™ Reverse Phase Protein Microarray — Qualitative
Human Stomach Tumor & Normal Tissue (PBPM8001L)



SomaPlex™ Reverse Phase Protein Microarray — Quantitative
Human Stomach Tumor & Normal Tissue (PBPM8001N)



Product Number	Description	Pkg Size	Price
PBPM2001L	Human Breast Tumor & Normal Tissue — Qualitative Microarray	Each	\$325.30
PBPM2001N	Human Breast Tumor & Normal Tissue — Quantitative Microarray	Each	479.70
PBPM7001L	Human Colon Tumor & Normal Tissue — Qualitative Microarray	Each	325.30
PBPM7001N	Human Colon Tumor & Normal Tissue — Quantitative Microarray	Each	479.70
PBPM4001L	Human Female Reproductive Tract Tumor & Normal Tissue — Qualitative Microarray	Each	325.30
PBPM4001N	Human Female Reproductive Tract Tumor & Normal Tissue — Quantitative Microarray	Each	479.70
PBPM13001L	Human Larynx & Skin Tumor & Normal Tissue — Qualitative Microarray	Each	270.20
PBPM13001N	Human Larynx & Skin Tumor & Normal Tissue — Quantitative Microarray	Each	424.60
PBPM9001L	Human Liver Tumor & Normal Tissue — Qualitative Microarray	Each	325.30
PBPM9001N	Human Liver Tumor & Normal Tissue — Quantitative	Each	479.70
PBPM1001L	Human Lung Tumor & Normal Tissue — Qualitative Microarray	Each	325.30
PBPM1001N	Human Lung Tumor & Normal Tissue — Quantitative Microarray	Each	479.70
PBPM3001L	Human Prostate, Bladder, Kidney Tumor & Normal Tissue — Qualitative Microarray	Each	325.30
PBPM3001N	Human Prostate, Bladder, Kidney Tumor & Normal Tissue — Quantitative Microarray	Each	479.70
PBPM8001L	Human Stomach Tumor & Normal Tissue — Qualitative Microarray	Each	325.30
PBPM8001N	Human Stomach Tumor & Normal Tissue — Quantitative Microarray	Each	479.70
PBPM16001L	Human Thyroid Tumor & Normal Tissue — Qualitative Microarray	Each	325.30
PBPM16001N	Human Thyroid Tumor & Normal Tissue — Quantitative Microarray	Each	479.70

PROTEIN ANALYSIS TEST STRIPS

PROTEIN BIOTECHNOLOGIES Dip-N-Spots™

Pre-run protein array strips

Dip-N-Spots™ are an innovative solution for rapid protein biomarker and differential expression analysis.

- Select from hundreds of total protein lysates prepared from cultured cells and mammalian tissues
- Prepared with precision arraying equipment and made using supported PVDF membranes for high protein binding and tear resistance to permit easy handling
- Simply align the strip to the marker key provided on the product data sheet to determine the tissue or cell type expressing the protein target
- Compatible with colourimetric, chemiluminescent or fluorescent detection systems



Dip-N-Spots™ Assay Strips with 2 mL Incubation Chambers

Product Number	Description*	Pkg Size	Price
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Normal Human Tissue Lysates

PBSHN1	Human Digestive Panel	Each	\$55.10
PBSHN2	Human Reproductive Panel	Each	55.10
PBSHN3	Human Endocrine/Urinary Panel	Each	55.10
PBSHN4	Human Cardio/Respiratory Panel	Each	55.10
PBSHN5	Human Lymphatic/Misc. Panel	Each	55.10
PBSHN6	Human Major Organ Panel	Each	55.10
PBSHN7	Human Brain 1 Panel	Each	55.10
PBSHN8	Human Brain 2 Panel	Each	55.10
PBSHN9	Human Brain 3 Panel	Each	55.10

Matched Human Tumor/Normal Cancer Tissue Lysates

PBST16X1	Human Lung Tissue Lysate Kit #1 Male/Mixed Cancer Subtypes	Each	\$55.10
PBST16X2	Human Lung Tissue Lysate Kit #2 Female/Mixed Cancer Subtypes	Each	55.10
PBST26X1	Human Breast Tissue Lysate Kit #1 Mixed Cancer Subtypes	Each	55.10
PBST26X2	Human Breast Tissue Lysate Kit #2 Ductal Carcinoma Subtypes	Each	55.10
PBST312X1	Human Prostate Tissue Lysate Kit Mixed Cancer Subtypes	Each	55.10
PBST46X1	Human Cervical Tissue Lysate Kit Mixed Cancer Subtypes	Each	55.10
PBST56X1	Human Ovarian Tissue Lysate Kit Mixed Cancer Subtypes	Each	55.10
PBST66X1	Human Uterine Tissue Lysate Kit Mixed Cancer Subtypes	Each	55.10

* Each strip comes individually packaged in a convenient 2 mL incubation chamber ready to use with minimal reagent volume requirements.

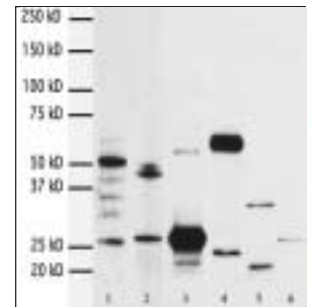
Note: This is only a partial listing. Dip-N-Spots™ and Dip-N-Blots™ are available with a selection of total protein lysates derived from tissues and cultured cells from human, mouse and rat.

PROTEIN BIOTECHNOLOGIES Dip-N-Blots™

Pre-run Western blotting strips

Pre-run Western blots in an innovative dipstick format simplify protein analysis or antibody characterization experiments.

- Select from hundreds of total protein lysates derived from cultured cells and mammalian tissues, purchase only the specific cell or tissue samples required for your project
- Prepared using 4-20% pre-cast 1D-PAGE gradient gels; gel to gel loading and running are constantly monitored for consistency and reproducibility
- Simply align the strip to the marker key provided on the product data sheet to determine the molecular weight of your target
- Compatible with colourimetric, chemiluminescent or fluorescent detection systems



Dip-N-Blots™ Western Blot Antibody Characterization Assay

Product Number	Description*	Pkg Size	Price
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Cell Line Lysate Western Blotting Dipsticks

PBBCL01	A549, human lung carcinoma	Each	\$55.10
PBBCL02	HeLa, human cervix epithelioid carcinoma	Each	55.10
PBBCL03	Jurkat, human lymphoma T lymphocyte, acute T cell leukemia	Each	55.10
PBBCL04	MCF7, human breast adenocarcinoma, pleural effusion	Each	55.10
PBBCL05	PC-3, human prostate adenocarcinoma	Each	55.10
PBBCL06	HepG2, human hepatocellular carcinoma	Each	55.10
PBBCL07	293, human transformed primary embryonal kidney	Each	55.10
PBBCL08	HT-29, human colon adenocarcinoma	Each	55.10
PBBCL09	A431, human epidermoid carcinoma	Each	55.10
PBBCL10	K562, human chronic myelogenous leukemia	Each	55.10
PBBCL11	MOLT4, human acute lymphoblastic leukemia	Each	55.10
PBBCL12	3T3-NIH, mouse embryo	Each	55.10
PBBCL13	HS 578T, human breast ductal carcinoma	Each	55.10
PBBCL14	HL60, human promyelocytic leukemia	Each	55.10
PBBCL15	Raji, human Burkitt lymphoma	Each	55.10
PBBCL16	OVCAR-3, human ovarian adenocarcinoma	Each	55.10
PBBCL17	SK-N-SH, human brain neuroblastoma	Each	55.10
PBBCL18	SW 1353, human humerus chondrosarcoma	Each	55.10
PBBCL19	SW 480, human colon adenocarcinoma	Each	55.10
PBBCL20	T24, human bladder transitional cell carcinoma	Each	55.10
PBBCL21	THP-1, human monocyte	Each	55.10
PBBCL22	786-0, human primary renal cell adenocarcinoma	Each	55.10
PBBCL23	CRL-1976, human uterine sarcoma	Each	55.10

* Each strip comes individually packaged in a convenient 2 mL incubation chamber, ready to use and minimizing the amount of reagents and antibodies required

The samples used to prepare Dip-N-Spots™ and Dip-N-Blots™ are also available as ready-to-use lysates. Please contact our Technical Support Department for more information.

ELECTROPHORESIS AND WESTERN BLOTTING

PAGEgel™ DUAL RUN AND BLOT SYSTEM

The PAGEgel™ Dual Run and Blot System runs or blots one or two mini-gels. PAGEgel™ SDS cassette gels run and blot generally in less than one hour. Thanks to a patent-pending asymmetrical blotting cassette design producing a voltage gradient, large and small proteins are easily transferred without the risk of incomplete transfer of the larger proteins or loss of small proteins from blow through.



- Gels or blotting cassettes are inserted quickly and without leakage. No screws or external clamps are required.
- Gels are loaded easily under running buffer, because the core can be assembled with gels and buffer outside the tank.
- Gels run at the same speed and temperature, because the gels sit symmetrically in the cell, with an equal amount of running buffer on each side.

The system is compatible with pre-cast gels in 6mm thick cassettes made by Cambrex, Invitrogen, and PAGEgel™. The system works with gels up to 90mm wide and 90mm tall and up to 1.5mm thick.

Product Number	Description	Pkg Size	Price
PGCA00002	PAGEgel™ Dual Run & Blot System Includes: Tank, Lid and Core Assembly, 1 Blotting Cassettes, 2 Sponge Pads, 6 Ice Packs, 2 Buffer Dam, 1	Each	\$634.70

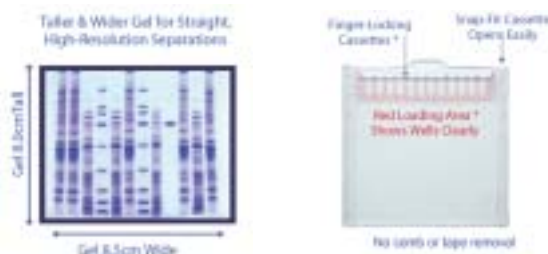


PAGEgel™ TWO-COLOUR SDS MARKER, 7.6 — 195 kDa

- An orange/blue pre-stained protein marker
- The recombinant proteins range in size from 7.6 kDa to 195 kDa
- The orange markers are 28 kDa and 71 kDa; the other eight bands are blue
- Ready to use in a 1x LDS sample buffer

Product Number	Description	Pkg Size	Price
PGEM05160	Two-Colour SDS marker	600µL	\$160.60

PAGEgel™ CASSETTE GELS FOR SDS PAGE



The PAGEgel™ mini-cassette pre-cast gels are made with coloured plastic beads in the loading area (patent pending) so that the wells are visible when loading. The beads are inert and do not move. The gel fingers project slightly above the lower plate to prevent sample carryover when loading and are held in place by grooves cut into the smaller front plate. The cassettes may be opened easily with the gel comb.

The composite-polymer construction (primarily cross-linked polyacrylamide with a small amount of agarose) imparts strength and elasticity to allow for handling without tearing and drying without cracking. The proprietary photo-polymerization system produces superb resolution.

Packaged in a 10 x 10 cm plastic cassette, the 8 cm x 8.5 cm gel is longer and wider than other mini-gels allowing for greater resolution and straightness of proteins, as well as the ability to expand the resolving range of a given SDS gel by running the small proteins off the unsealed bottom of the gel.

The gels are compatible with Invitrogen X-cells, Owl Wolverine, Hoefer Tall Mighty Small and PAGEgel's Dual Run/Blot Cell.

Product Number	Description	Pkg Size	Price
PGCK00812	SDS Gel 8% 12 well	Each	\$12.90
PGCK01012	SDS Gel 10% 12 well	Each	12.90
PGCK01212	SDS Gel 12% 12 well	Each	12.90
PGCK01612	SDS Gel 16% 12 well	Each	12.90
PGCK02012	SDS Gel 20% 12 well	Each	15.40
PGCK40812	SDS Gel 4-8% 12 well	Each	12.90
PGCK41212	SDS Gel 4-12% 12 well	Each	12.90
PGCK42012	SDS Gel 4-20% 12 well	Each	12.90
PGCK82012	SDS Gel 10-20% 12 well	Each	12.90
PGCB31010	LDS Sample Buffer(4X)	10mL	15.40
PGCB32001	DTT Reducer	1mL	10.30
PGCB60525	Standard SDS Run Buffer(20X)	5L	578.30
PGCB13525	Low Range SDS Run Buffer (20X)	5L	578.30

Additional gels and buffers are available. Please contact our Technical Support Department.

USB PROTEIN MARKER, 10-225 kDa

- Recombinant proteins designed for convenient and accurate sizing of protein samples
- Ready-to-load form in gel loading buffer
- Simply add 5 µL of the marker to a standard SDS-polyacrylamide gel for visualization with Coomassie® blue



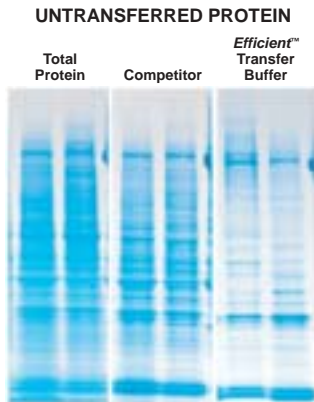
Product Number	Description	Pkg Size	Price
UB76740S1	Marker 10-225 kDa	500µL	\$161.00
UB76745S1	2X SDS Sample Buffer	1mL	25.60

G-BIOSCIENCES Efficient™ WESTERN TRANSFER BUFFER



Improved transfer buffer for increased protein transfer efficiency

Efficient™ Western Transfer Buffer is a pre-made, ready-to-use 20x transfer buffer prepared for optimal conductivity and efficient protein transfer without generating excessive heat or transfer distortion.



A comparison of protein transfer efficiency between Efficient™ Western Transfer Buffer stained gel after transfer (lanes 5-6) and a leading competitor stained gel after transfer (lanes 3-4). The total protein, before transfer, is shown in lanes 1 and 2. The image shows the untransferred protein remaining in the gels. A high concentration of protein (75µg) was loaded to clearly show the difference in the transfer buffers.

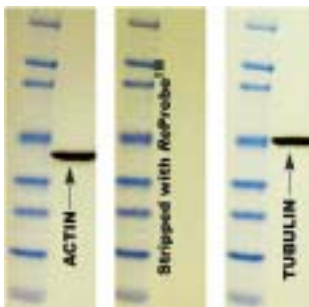
Product Number	Description	Pkg Size	Price
GB786019	Efficient™ Western Transfer Buffer [20x]	1L	\$60.90

G-BIOSCIENCES Western ReProbe™

Western ReProbe™ is specifically formulated to dissociate and remove antibodies bound to proteins on western blots without destroying the antigenic binding affinity, allowing you to re-expose your membrane to a new primary antibody.

Removal of antibodies also removes corresponding chemiluminescent or radio-isotopic signals from the blots. The stripped blots can then be re-probed.

ReProbe™ is not recommended for stripping colour producing Western blots that use substrates such as TMB, chloronaphthol, and DAB.



Mouse liver extract was transferred onto PVDF membrane and probed for actin. Membrane was then stripped with ReProbe™ and probed for tubulin. Tubulin was developed without loss of signal or background problems usually associated with re-probing.

Product Number	Description	Pkg Size	Price
GB786119	Western ReProbe™ [5X]	100 mL	\$130.90

USB Rodeo™ ECL WESTERN BLOTTING REAGENT

A well characterized detection chemistry for routine detection using HRP conjugated antibodies and luminol-based enhanced chemiluminescence.



- Routine Detection — Sensitivity in the nanogram range
- Ease-of-Use — Use with any standard protocol for chemiluminescent Western blot detection
- Rapid Exposure Times — Capture signal in seconds to minutes
- Ability to Re-Probe — Blots may be stripped and re-probed using standard procedures (see product number GB786119 - GBiosciences Western ReProbe™)
- Flexible — Use with either nitrocellulose or PVDF membrane



Routine Western Blot Detection using Rodeo™ ECL Reagents

Glutathione-S-Transferase (1000 ng, 500 ng, 250 ng, 125 ng, 62.5 ng, 31 ng, 16 ng, 8 ng, 4 ng, and 2 ng) was blotted onto PVDF membrane and detected with Rodeo™ ECL Reagents. A. 10 sec exposure to film; B. 15 min exposure with CCD camera

Product Number	Description	Pkg Size	Price
UB72550	Rodeo™ ECL Western Blotting Detection Kit Includes: Rodeo™ ECL Detection Reagents* 1 and 2, 50mL Anti-Rabbit IgG HRP Conjugate, 200µL Anti-Mouse IgG HRP Conjugate, 200µL Rodeo™ Blocker, 25g Rodeo™ Saddle Soap, 10% Solution, 14 x 2mL	1000cm ²	\$160.60

* Rodeo™ ECL reagents are also available separately

G-BIOSCIENCES SWIFT™ TRANSFER PADS

SWIFT™ transfer pads are treated with a proprietary electrolyte buffer to enhance Western blot transfer efficiency (patent pending). Each SWIFT™ transfer pad can reduce transfer time by over 50% while consistently producing high efficiency transfer. The SWIFT™ transfer pad technology prevents overheating and power shortages by allowing lower chemical concentrations in the transfer buffers, without affecting transfer efficiency. The SWIFT™ transfer pad technology combines the simplicity of semi-dry sandwich assembly with the improved efficiency of wet blot transfers, reducing the need for assembly in large tanks of buffer. SWIFT™ is compatible with any transfer system and is supplied with or without nitrocellulose or PVDF membranes.

Product Number	Description*	Pkg Size	Price
GB786370	SWIFT™ Mini Transfer Pads (7.5 x 8.5 cm)	20	\$58.00
GB786371	SWIFT™ Mini Transfer Pads (7.5 x 8.5 cm) with Nitrocellulose	20	162.20
GB786372	SWIFT™ Mini Transfer Pads (7.5 x 8.5 cm) with PVDF	20	164.50
GB786373	SWIFT™ Medi Transfer Pads (9.5 x 15 cm)	20	76.80
GB786374	SWIFT™ Medi Transfer Pads (9.5 x 15 cm) with Nitrocellulose	20	344.10
GB786375	SWIFT™ Medi Transfer Pads (9.5 x 15 cm) with PVDF	20	352.20

* Packages of SWIFT™ Transfer Pads include 500 mL SWIFT™ Buffer

PROTEIN ASSAYS

G-BIOSCIENCES PROTEIN ASSAYS



G-Biosciences offers protein assays and accessories for a wide variety of applications. They offer colourimetric protein assays, single tube assays, as well as test strip based assays for rapid analysis. These assays are suitable for even the most demanding research applications.

Product Number	Description*	Features	Sample Volume	Linear Response Range	Assay Time (~minutes)	Pkg Size	Price
GB786005	NI™ (Non-Interfering)	Overcomes interference of agents commonly present in protein solutions - Colourimetric	1-50 µL	0.5-50 µg	30	500 Assays	\$217.80
GB78620	dotMETRIC™	1 µL protein assay for rapid estimation of small sample volumes using test strips - No protein-to-protein variation - Resistant to detergents, reducing agents and other laboratory agents	1 µL	25 ng - 1µg	10	> 300 Assays	202.30
GB78621	dotMETRIC™ with Spot Application Device Includes test strips, scale, spot application board, plastic forceps and 1 µL application capillaries	1 µL protein assay for rapid estimation of small sample volumes using test strips - Same as dotMETRIC™ GB78621 with the addition of the dotMETRIC™ Spot Application Device	1 µL	25 ng - 1µg	10	> 300 Assays	337.80
GB78612	CB™	Coomassie dye protein assay, based on the Bradford Assay - Suitable for tube or microplate assays - Ready to use assay reagents	5-100 µL	0.5-50 µg	30	500 Assays	370.80
GB78612X	CB-X™	Single tube assay - Rapid precipitation and colour development - No requirement for a calibration plot	5-100 µL	0.5-50 µg	10	500 Assays	192.50
GB786020	SPN™ Includes SPN™ columns	Spin format protein assay for single sample - Unaffected by non-protein chemicals and agents - No toxic agents used - laboratory and environmentally safe	1-10 µL	0.5-10 µg	10	50 Assays	179.50
GB786021	SPN™-htp Includes SPN™ 96 well plates	Spin format protein assay for high throughput screening - Unaffected by non-protein chemicals and agents - No toxic agents used - laboratory and environmentally safe	1-10 µL	0.5-10 µg	10	5 x 96 assay plates	364.90

* All kits include necessary reagents and protein standard BSA (2mg/mL), 5 mL

G-BIOSCIENCES PROTEIN ASSAY ACCESSORIES

Bovine Serum Albumin and Bovine γ-Globulin Standards

- Standards - 2 mg/mL, prepared in saline buffer
- Prediluted Standards
- 6 aliquots ranging in concentration from 0.1 mg/mL to 1.0 mg/mL

Protein dotMETRIC™ Accessories

- dotMETRIC™ Spot Application Device — Simplifies the application of one or more samples and improves reliability of results
- Application Glass Capillary Tips — 1 µL glass capillary tips for use with Spot Application Device
- Sample Application Tips — 1-10 µL pipettor tips
- Developing Trays — For developing test strips



Product Number	Description	Pkg Size	Price
GB786006	Bovine Serum Albumin Standard (2mg/mL)	2 x 5 mL	\$44.90
GB786114	Prediluted Bovine Serum Albumin Standards (0.1mg/mL — 1.0 mg/mL)	6 x 5 mL	42.10
GB786007	Bovine γ-Globulin Standard (2 mg/mL)	2 x 5 mL	44.90
GB786114G	Prediluted Bovine γ-Globulin Standards	6 x 5 mL	42.10
GB78663	dotMETRIC™ Spot Application Device	Each	127.60
GB78623	1µL Application Glass Capillary Tips	100	28.30
GB78664	Sample Application (pipette) Tips	96	20.30
GB78624	Developing Trays	2	15.90

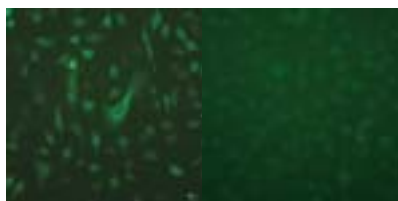
TRANSFECTION AND PROTEIN PRODUCTION

POLYPLUS TRANSFECTION PULSin™

A reagent for efficient delivery of functional proteins/antibodies and peptides to living cells

The delivery of proteins and antibodies using PULSin™ represents a powerful approach for functional studies. It allows for high levels of transfection from a fast, simple procedure. PULSin™ contains a proprietary cationic amphiphile molecule that forms non-covalent complexes with proteins and antibodies. Complexes are internalized via anionic cell-adhesion receptors and are released into the cytoplasm where they disassemble. With PULSin™, you can target intracellular proteins with antibodies in living cells without fixation, thus studying the real life localization of your target protein.

- Effective and robust delivery into the cytoplasm
- Delivery to a wide variety of cells including primary cells
- Non-toxic and delivers functional proteins



Delivery of fluoroscein-conjugated anti-α-tubulin antibody (left) with or without (right) PULSin™ to HeLa cells.

Product Number	Description	Pkg* Size	Price
LP50101	PULSin™ Includes: PULSin™ Reagent, 0.1 mL R-Phycoerythrin, 20 µg HEPES Dilution Buffer, 20 mL	6 rxns	\$88.20
LP50104	PULSin™ Includes: PULSin™ Reagent, 0.4 mL R-Phycoerythrin, 20 µg HEPES Dilution Buffer, 20 mL	24 rxns	297.80
LP50116	PULSin™ Includes: PULSin™ Reagent, 4 x 0.4 mL R-Phycoerythrin, 20 µg HEPES Dilution Buffer, 20 mL	96 rxns	949.50

* 0.4 mL is sufficient to perform 24 reactions in 6-well plates

ACTIVE MOTIF Chariot™

Chariot™ is a revolutionary delivery reagent that quickly and efficiently transports biologically active proteins, peptides and antibodies directly into cells. The typical delivery efficiency is 60-95%. Less than two hours after delivery, live cells can be assayed to determine the effects of the introduced material, without the need for fixing. This makes Chariot™ an ideal tool for functional studies, including delivering inhibitory proteins, labeling organelles, screening peptide libraries and studying protein half-lives and transient complementation.



Product Number	Description	Pkg Size	Price
AM30025	Chariot™ Includes: Chariot™ Transfection Reagent, 0.3 mg PBS, 1 mL β-Galactosidase, 25µg Sterile Water, 1 mL	25 rxns	\$286.80
AM30100	Chariot™ Includes: Chariot™ Transfection Reagent, 0.3 mg PBS, 1 mL β-Galactosidase, 25µg Sterile Water, 1 mL	100 rxns	617.90
AM35001	β-Galactosidase Staining Kit	75 rxns	230.30

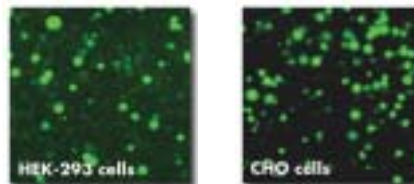


POLYPLUS TRANSFECTION Fecturin™

A reagent for recombinant protein production in serum free media

Fecturin™ is a reagent specifically developed for transient transfection of non-adherent or adherent mammalian cells grown in synthetic media lacking any animal proteins. Fecturin™ is efficient for the production of protein in HEK-293 and CHO cells cultivated in different synthetic media following adaptation to suspension culture. Fecturin™ is chemically defined and thus does not contain any component of animal-origin (protein or peptide). The protocol supports cell growth and transfection conditions adapted to the high-density cell culture that leads to high-yield protein production.

- High levels of recombinant protein in less than one week
- Versatile: efficient in synthetic media for HEK 293 and CHO
- Guaranteed free of animal-origin material



Transfection of HEK-293 and CHO cells using Fecturin™

Cells were seeded at 1 million per mL in either FS or C-CHO media, two commercially available synthetic media. HEK-293 or CHO cells were transfected with pCMV-eGFP plasmid following the standard Fecturin™ protocol. Cells were visualized by fluorescent microscopy one day post-transfection.

Product Number	Description	DNA Delivered	Pkg Size	Price
LP109TEST	Fecturin™	0.1-0.3 mg	0.3 mL	\$164.30
LP109001	Fecturin™	0.3-1 mg	1 mL	423.50
LP109010	Fecturin™	3-10 mg	10 mL	3,591.80

POLYPLUS TRANSFECTION jetPEI™

Routine protein production in standard media

jetPEI™ is a potent and versatile DNA transfection reagent. It is well suited for transfection of mammalian cells grown in media with serum for high yield production of proteins. jetPEI™ provides exceptionally reproducible results and allows efficient and scalable transfection using a dedicated straightforward protocol.

jetPEI™ is free of components of animal origin.

Product Number	Description	Pkg Size	Price
LP10101N	jetPEI™ Includes: NaCl Solution, 5 mL	0.1 mL	\$44.10
LP10105	jetPEI™	0.5 mL	173.10
LP10105N	jetPEI™ Includes: NaCl Solution, 50 mL	0.5 mL	200.70
LP10110	jetPEI™	1 mL	263.60
LP10110N	jetPEI™ Includes: NaCl Solution, 50 mL	1 mL	291.10
LP10140	jetPEI™	4x1 mL	934.10
LP10140N	jetPEI™ Includes: NaCl Solution, 4x50 mL	4x1 mL	1,016.80

* One mL of jetPEI™ is sufficient to perform 500 transfection in 24 well plates (1µg of DNA per well)

PROTEIN EXPRESSION AND REFOLDING

DUALSYSTEMS DUALXpress

The DUALXpress Protein Expression kit is the natural choice for high level expression and purification of recombinant proteins in *E. coli*. It incorporates the CASCADE™ Expression System for controlled expression of proteins and the LYTAG purification tag for highly efficient, one-step purification of recombinant proteins. Proteins cloned into the pALEX2 series of vectors are expressed simply by adding INDUCER solution to the medium. Following induction, recombinant proteins are purified in one step using the dualTRAP affinity resin. Purities of more than 95% can be easily reached due to the exceptionally high selectivity of the column.

Product Number	Description	Pkg Size	Price
DUP01007	DUALXpress Kit Includes: pALEX2a, b, c expression vectors REG-12 <i>E. coli</i> expression strain INDUCER solution PROLYSE extraction solution dualTRAP spin columns Elution buffer AntiLYTAG polyclonal Ab	Kit	\$820.00

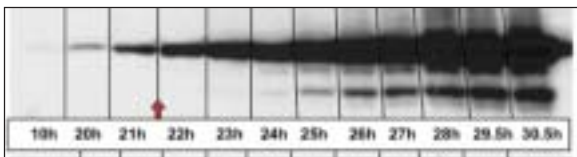
DUALSYSTEM KickStart

The KickStart protein expression kit has been specifically designed for inducible, high-level expression of recombinant proteins in *Saccharomyces cerevisiae* as well as easy purification with the popular Strep-tag. KickStart expression vectors combine two important features for protein expression:



Inducible ADH2 Promoter: The ADH2 promoter is induced when glucose becomes depleted in the medium. During early growth in YPD medium glucose levels are high and the ADH2 promoter is inactive - thereby preventing negative effects on yeast growth. Once the cells reach the early stationary phase glucose is depleted from the medium and the ADH2 promoter is induced, producing high amounts of protein.

KanMX Cassette: KickStart vectors feature a KanMX cassette, which allows selection with G418 in rich medium. The use of rich medium such as YPD will significantly enhance cell densities and protein yield.



Expression of beta-galactosidase from pKS1-ST
pKS1-ST-Gal was transformed into the expression strain DSY-5 and grown on YPD plates supplemented with 60 µg/mL G418. Several colonies were mixed and inoculated into YPD supplemented with 60 µg/mL G418. Aliquots were taken at the indicated time points and used to prepare total cell extracts. Beta-galactosidase was detected by Western blotting against the HA epitope tag. The red arrow indicates the time point where glucose in the medium is depleted.

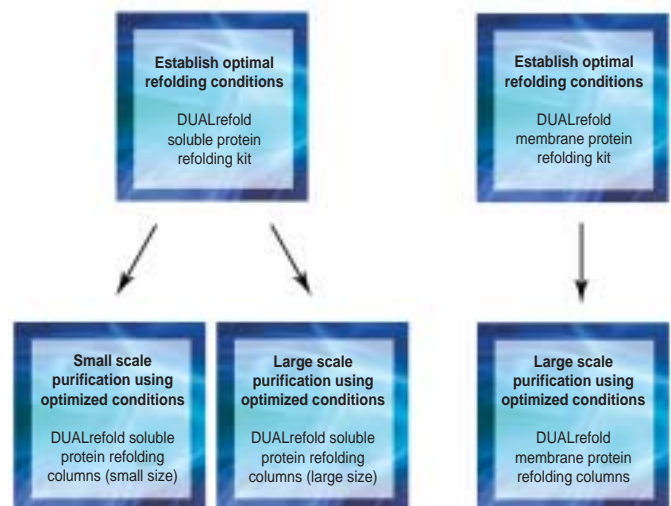
Product Number	Description	Pkg Size	Price
DUP01006	KickStart Protein Expression Kit Includes: pKS1 expression vector pKS1-ST Strep-tag expression vector pKS1-ST-Gal control vector DSY-5 expression strain XT extraction buffer Glass beads	Kit	\$790.00

DUALSYSTEMS DUALrefold

Often, proteins can only be purified from total cellular extracts using denaturing conditions. But even when applying mild conditions, some proteins can only be purified in a denatured state. This is particularly true for larger proteins with complicated structures, such as membrane proteins. The principle of protein refolding is based on the following parameters:

- Different proteins require different conditions to fold
- Conditions that stabilize the folding intermediates often help to yield correctly folded proteins
- Columns completely remove denaturants

The DUALrefold system integrates these three factors and provides a refolding kit which is both very efficient and easy to use. To find the optimal conditions for protein refolding the soluble or membrane protein refold kits supply 10 and 20 columns respectively, each with different conditions. Once optimal conditions are determined the appropriate columns can be selected in the large or small scale format. Large scale DUALrefold protein folding columns are designed for preparative protein folding experiments (5 -10 mg protein) after the optimal folding conditions have been identified. Small scale DUALrefold protein folding columns are designed for small-scale (0.6 - 1.2 mg) preparative protein folding experiments after the optimal folding conditions have been identified.



Column selection process for soluble proteins (left) and integral membrane proteins (right)

Product Number	Description	Pkg Size	Price
DUP07201	DUALrefold Soluble Protein Refolding Kit Includes: 10 Spin Columns and Reagents	Kit	\$120.00
DUP07501	DUALrefold Membrane Protein Refolding Kit Includes: 20 Spin Columns and Reagents	Kit	210.00

For ordering information and pricing of large and small scale columns please contact our Technical Support Department.

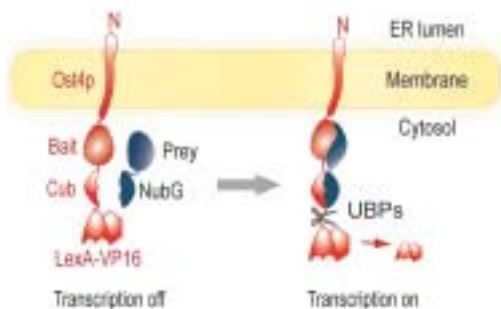
DUALSYSTEMS DUALhunter KIT

Novel interaction partner screening for transcriptionally active proteins

Due to their ease of use, genetic screening systems such as the yeast two-hybrid (Y2H) system have been especially successful in identifying novel protein interactions. However, the Y2H system is biased against certain classes of proteins, such as transcription factors. When fused to a DNA-binding domain, these proteins autonomously activate transcription because they contain sequence stretches that act as transcriptional activators for the RNA polymerase II complex. Since the output of the Y2H system is based on transcriptional activation of a reporter gene, these proteins activate the reporter genes on their own, in the absence of a protein interaction. Such proteins are termed "self-activating" and they cannot be used in a classical yeast two-hybrid system. Unfortunately, many important proteins belong to this class, including transcription factors, regulatory proteins associated with DNA, checkpoint proteins like p53 or p65, and many other proteins.

With the DUALhunter kit from Dualsystems, researchers can find novel protein interactions without worrying about self-activation. A protein of interest (the bait) is inserted between the membrane protein Ost4p and the C-terminal half of ubiquitin (Cub), followed by the artificial transcription factor LexA-VP16. A second protein (the prey) is fused to the mutated N-terminal half of ubiquitin (NubG).

The detection of a protein interaction is based on the split-ubiquitin system. If bait and prey interact, Cub and NubG complement to form split-ubiquitin, followed by cleavage and translocation of LexA-VP16 to the nucleus and transcriptional activation of endogenous reporter genes. The protein interaction between bait and prey is detected using the output of the reporter genes, either via a growth selection on minimal medium, or via the color marker lacZ.



- Quickly screen a protein of interest for novel interactors in vivo
- No need to truncate the protein of interest or to select subdomains
- Screen transcriptionally active proteins or self-activating proteins
- Screen proteins that cannot be screened with yeast two-hybrid systems

Product Number	Description	Pkg Size	Price
DUP01005	DUALhunter Kit Includes: Bait vector Prey vector Control bait vector Control prey vector Control prey Yeast reporter strain	Kit	\$1,700.00

Dualsystems Biotech

Dualsystems offers a range of cDNA libraries that are ready for yeast transformation. Please contact our Technical Support Department for more information.

DUALSYSTEMS DUALmembrane KIT

The DUALmembrane system is a genetic assay to identify interactions between an integral membrane protein or a membrane-associated protein and other integral membrane proteins, membrane-associated proteins or soluble proteins.

- Based on a split ubiquitin system
- Interactions are detected in situ at the membrane
- Novel interactors of your protein of interest are quickly identified by screening cDNA libraries
- Easier to use than biochemical methods and does not require protein expression and purification

Product Number	Description	Pkg Size	Price
DUP01001	DUALmembrane Kit 3 Includes: Type II bait vector Type I bait vector Type 1 signal sequence prey vector Leader sequence prey vector Control bait Control prey Yeast reporter strain Trial size HTX β -galactosidase assay (2 x 96 assays)	Kit	\$3,900.00
DUP09901	DUALmembrane Starter Package Includes: DUALmembrane™ kit 3 Standard size HTX β -galactosidase assay (4 x 96 assays) Yeast transformation kit	Kit	4,100.00

Commercial entities who wish to purchase DUALmembrane reagents must obtain a separate license. Please contact our Technical Support Department for more information.

DUALSYSTEMS DUALhybrid KIT

The DUALhybrid™ kit works on the yeast-two-hybrid concept and is the first choice for soluble proteins that are not self-activating. It is a complete kit for all types of yeast two-hybrid studies, including complex interaction studies (yeast three-hybrid). The kit offers a choice of two bait vectors for maximum flexibility and decreased chances of self-activating baits as well as the triple reporter strain NMY51 to ensure optimal screening stringency. A complete set of controls: pLexA-p53, pLexA-lamin C and pACT-largeT control vectors.

Product Number	Description	Pkg Size	Price
DUP01004	DUALhybrid Kit Includes: Prey vector Bridging vector Bait vectors, 2 Control set	Kit	\$900.00

DUALSYSTEMS EasyClone cDNA LIBRARY CONSTRUCTION KIT

EasyClone cDNA synthesis is based on a novel technology utilizing the specific features of MMLV-based reverse transcriptase to create full length enriched double stranded cDNA from total or polyA+ RNA samples. cDNAs are amplified by representational PCR and cloned directionally into DUALmembrane or DUALhybrid library. No extensive know-how in library construction is needed - the kit supplies all reagents needed for library construction and the detailed manual will guide you through all steps of construction.

Product Number	Description	Pkg Size	Price
DUP01010	EasyClone cDNA Library Construction	Kit	\$1,450.00

PROTEIN MODIFICATION

ACTIVE MOTIF SUMOlink™

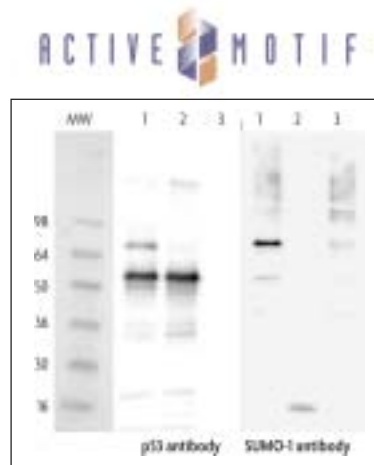
Simple, effective *in vitro* Sumoylation of proteins with proven controls

Post-translational modifications can alter protein function through modifying activity or intracellular localization. The pathway of SUMO (small ubiquitin-like modifier) conjugation affects many biological processes including chromosomal organization and function, DNA repair, nuclear transport and signal transduction pathways. Many SUMO substrates are transcription factors, where SUMO modification is commonly associated with decreased transcriptional activity. However, in some cases sumoylation can augment transcription factor activity.

Active Motif's SUMOlink™ Kits provide a simple method for generating sumoylated proteins *in vitro*. Using the sumoylation enzyme cascade, covalent linkage of the carboxy-terminal SUMO-1, -2 or -3 peptide substrates to specific lysine residues on the target protein occurs via isopeptide bonds.

Product Number	Description	Pkg Size	Price
AM40120	SUMOlink™ SUMO-1 Kit	20 rxns	\$455.50
AM40220	SUMOlink™ SUMO-2/3 Kit	20 rxns	455.50

Kits include: SUMO-1 or SUMO-2 and SUMO-3 wild-type and mutated proteins, SUMO-1 or SUMO-2/3 antibodies, p53 control protein, p53 antibody, Sumoylation buffer, Protein buffer, E1 activating enzyme and E2 conjugating enzyme.



Specific SUMO-1 labeling of p53 by SUMOlink™

Western blot analysis of *in vitro* sumoylation of p53 protein by wild-type and mutated isoforms of SUMO-1: The two Western blots were incubated with p53 antibody (1:5000 dilution) and SUMO-1 antibody (1:4000 dilution). The p53 protein is sumoylated only by the wild type SUMO-1 protein. Lanes 1: Wild-type SUMO-1 protein conjugation reaction. Lanes 2: Mutated SUMO-1 protein conjugation reaction. Lanes 3: No p53 control protein used in a wild-type SUMO-1 protein conjugation reaction.

ABGENT PROTEIN MODIFICATION ANTIBODIES

For the identification of a protein's post-translational modification



Please note: these are partial listings

Phosphorylation*

Protein phosphorylation is one of the most significant signal transduction mechanisms by which signals regulate crucial processes. Rapid and cascading phosphorylation of target proteins permits dynamic control of cell signaling and subsequent adaptations of cellular physiology in response to changes in environmental and cellular stimuli.

Product Number	Target	Host**	Antigen**	Pkg Size	Price
ABGAP7807A	ACVRL1	rb	syn	0.1mg	\$301.90
ABGAP7697A	BLK	rb	syn	0.1mg	301.90
ABGAP7526B	CDKL1	rb	syn	0.1mg	301.90
ABGAP6809B	MTM1	rb	syn	0.1mg	301.90
ABGAP8414A	PTP γ	rb	syn	0.1mg	301.90

Sumoylation*

Sumoylation is a modification system involving a reversible covalent attachment of SUMO to lysine residues in substrate proteins. The process is thought to provide a new binding site for interactions with other proteins, thereby acting as a recruitment factor for multiprotein complexes. Sumoylation antibodies are targeted against each class of the proteins and enzymes associated with this critical protein modification event.

Product Number	Target	Host**	Antigen**	Pkg Size	Price
ABGAP1222A	SUMO1	rb	syn	0.1mg	\$301.90
ABGAP1224A	SUMO2/3 (c-term)	rb	syn	0.1 mg	301.90
ABGAP1290A	Pan SUMO	rb	hn	0.1 mg	301.90
ABGAP1263B	SUMO4	rb	syn	0.1mg	301.90
ABGAP2011B	SAE1	rb	syn	0.1mg	301.90

* Please contact our Technical Support Department for the complete list of antibodies for Sumoylation, Ubiquitination, Phosphorylation, Methylation, Acetylation, Glycosylation, and other protein modifications.

** Host/Antigen Key: rb=rabbit, hn=human, syn=synthetic, ms=mouse

Abgent Now Offers Antibody Sampler Kits

Sampler kits offer an affordable way to purchase multiple validated antibodies. Assemble a collection of antibodies to your pathway of interest, or economically screen for the antibody that is perfect for your application. Contact our Technical Support Department for more information.

Methylation*

Protein methylation antibodies are designed to detect protein arginine methylation, a reversible post-translational modification event catalyzed by arginine N-methyltransferases (PRMT).

Product Number	Target	Host**	Antigen**	Pkg Size	Price
ABGAP1001A	PRMT1	rb	syn	0.1mg	\$301.90
ABGAP1002A	PRMT2	rb	syn	0.1mg	301.90
ABGAP1034A	Dnmt3a	rb	syn	0.1 mg	301.90
ABGAP1022A	JMJD3 (N-term)	rb	syn	0.1 mg	301.90
ABGAM1191A	SET07	ms	hn	0.1 mg	301.90

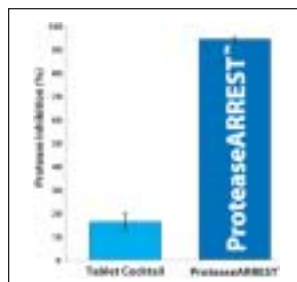
Ubiquitination*

Ubiquitin (Ub) is a 76 amino acid highly conserved eukaryotic polypeptide that selectively marks cellular proteins for proteolytic degradation by the 26s proteasome. The process of target selection, covalent attachment, and shuttle to the 26S proteasome is a vital means of regulating the concentrations of key regulatory proteins (as well as misfolded or abnormal proteins) in the cell by limiting their lifespan.

Product Number	Target	Host**	Antigen**	Pkg Size	Price
ABGAP2184A	HRD1 (c-term)	rb	syn	0.1 mg	\$301.90
ABGAP1150A	ISG15	rb	syn	0.1 mg	301.90
ABGAP1254A	Mdm2 (c-term)	rb	syn	0.1 mg	301.90
ABGAP2104A	SMURF1 (N-term)	rb	syn	0.1 mg	301.90
ABGAP2105A	SMURF2 (N-term)	rb	syn	0.1 mg	301.90

G-BIOSCIENCES ProteaseArrest™

ProteaseArrest™ is a broad range protease inhibitor cocktail with wide species specificity. It contains agents to inhibit serine, cysteine, and metalloproteases as well as calpain proteases. ProteaseArrest™ shows excellent inhibition of protease activity and is suitable for the protection of proteins during sample preparation and protein purification from animal tissues, plants, yeast and bacteria.



ProteaseArrest™ outperforms tablet format protease inhibitor cocktails.

Protease inhibition in mouse pancreas lysate with ProteaseArrest™ (EDTA-free) and a commercially available EDTA-free tablet protease cocktail was compared, using Protease Screening™ Kit. The assay used 0.5mg/mL pancreas lysate and incubation conditions of 37°C for 2.5 hours. ProteaseArrest™ inhibited over 95% of total proteases, almost 80% more protease inhibition compared to the tablet protease inhibitor cocktail.

Bacterial ProteaseArrest™ - Inhibits bacterial serine, cysteine and other bacteria specific proteases including aminopeptidases and aspartic proteases.

Plant ProteaseArrest™ - Inhibits plant serine, cysteine and other plant specific proteases including aminopeptidases, aspartic and metalloproteases.

Mammalian ProteaseArrest™ - Inhibits mammalian serine, cysteine and other mammal specific proteases including aminopeptidases, trypsin-like and aspartic proteases.

Yeast/Fungal ProteaseArrest™ - Inhibits yeast and fungal serine, cysteine and metalloproteases.

ProteaseArrest™ cocktails contain:

- Irreversible and reversible protease inhibitors
- Optional EDTA solution for inhibition of metalloproteases

Focus™ ProteaseArrest™

Focus™ ProteaseArrest™ is fully compatible with 2D electrophoresis and subsequent mass spectrometry. It uses an alternative to EDTA as an inhibitor of metalloproteases to optimize the action of nucleases or to remove nucleic acids from samples. It also uses PMSF as its primary serine protease inhibitor as opposed to the commonly used pepabloc® which has been reported to modify proteins at high concentrations and results in artifacts in 2D electrophoresis and mass spectrometry.

Product Number	Description	Pkg Size	Price
GB786108	ProteaseArrest™ [100X] Includes: EDTA Solution 0.5M [100X], 2mL	2mL	\$144.80
GB786329	OneQuant™ ProteaseArrest™ [100X] Includes: EDTA Solution 0.5M [100X], 2mL	24 x 100µL	146.20
GB786330	Bacterial ProteaseArrest™ [100X] Includes: EDTA Solution 0.5M [100X], 2mL	2 mL	150.60
GB786332	Plant ProteaseArrest™ [100X]	2 mL	150.60
GB786331	Mammalian ProteaseArrest™ [100X] Includes: EDTA Solution 0.5M [100X], 2mL	2 mL	150.60
GB786333	Yeast/Fungal ProteaseArrest™ [100X]	2 mL	150.60
GB786108F	Focus™ ProteaseArrest™ [100X]	1 mL	144.80

G-Biosciences also offers protease assays and screening systems. Please contact our Technical Support Department for more information.

G-BIOSCIENCES ProteCEASE™

Protease inhibitor cocktail for large sample volumes

ProteCEASE™ protease inhibitor cocktails contain optimized concentrations of various protease inhibitors, which can be used during protein purification from various samples including animals, plants, yeast, bacteria and fungal lysates.



- Greater than 90% protease inhibition
- Inhibits a wide variety of proteases, including cysteine, serine and metalloproteases
- Available with and without EDTA
- Supplied reconstitution buffer ensures all inhibitors dissolve in sample
- Designed for 50 and 100 mL sample sizes

Product Number	Description	Pkg* Size	Price
GB786326	ProteCEASE™-50, EDTA Free <i>1 vial per 50 mL buffer</i> Includes: ProteCEASE™ Reconstitution Buffer, 2 x 2.5 mL	10 vials	\$179.60
GB786327	ProteCEASE™-100 EDTA Free <i>1 vial per 100 mL buffer</i> Includes: ProteCEASE™ Reconstitution Buffer, 2 x 2.5 mL	10 vials	358.00
GB786334	ProteCEASE™-50 plus EDTA <i>1 vial per 50 mL buffer</i> Includes: ProteCEASE™ Reconstitution Buffer, 2 x 2.5 mL EDTA Solution 0.5M [100X], 5 mL	10 vials	179.60
GB786336	ProteCEASE™-100 plus EDTA <i>1 vial per 100 mL buffer</i> Includes: ProteCEASE™ Reconstitution Buffer, 2 x 2.5 mL EDTA Solution 0.5M [100X], 5 mL	10 vials	355.70

* ProteCEASE™-50 is also available in a 20 vial format.

G-BIOSCIENCES PhosphataseArrest™

PhosphataseArrest™ cocktails consist of a broad spectrum of phosphatase inhibitors that are developed to target specific phosphatase categories. They are ideal for inhibition in tissue extractions and cell lysis experiments and are compatible with most common protein assays.

PhosphataseArrest™ I

- Consists of 5 phosphatase inhibitors that target all phosphatase categories including serine/threonine specific, tyrosine specific and dual specificity phosphatases
- Not suitable for direct IEF/2D studies due to high salt concentrations

PhosphataseArrest™ II

- Consists of 5 phosphatase inhibitors that target acid, alkaline and tyrosine phosphatases
- Not suitable for direct IEF/2D studies due to high salt concentrations

PhosphataseArrest™ III

- Consists of 3 phosphatase inhibitors that target alkaline and serine/threonine phosphatases
- Compatible with IEF/2D studies

Product Number	Description	Pkg Size	Price
GB786450	PhosphataseArrest™ I [100X]	1mL	\$161.10
GB786451	PhosphataseArrest™ II [100X]	1mL	60.90
GB786452	PhosphataseArrest™ III [100X]	1mL	60.90

MACHEREY-NAGEL Protino® GLUTATHIONE AGAROSE 4B

Purification of GST-tagged proteins

Protino® Glutathione Agarose 4B enables fast and convenient purification of recombinant Glutathione-S-Transferase (GST)-tagged proteins from whole cell extracts by affinity chromatography.



Binding of protein is based on the selective interaction between the Glutathione-S-Transferase tag of the recombinant protein and the immobilized glutathione of the affinity resin. The binding process is highly specific and selective. Thus, only one chromatographic step leads to a high degree of purification.

- High Flexibility — for batch, gravity flow and FPLC
- Universal Use — Suitable for small proteins, large protein complexes, proteins with low expression rates
- A cost effective alternative for GST-tag purification

Product Number	Description	Pkg Size*	Price
MCN74550010	Protino® Glutathione Agarose 4B	10 mL	\$192.10
MCN745500100	Protino® Glutathione Agarose 4B	100 mL	1,419.80

MACHEREY-NAGEL Protino® Ni-TED/IDA

Easy purification of His tagged proteins

Protino® Ni-TED and Ni-IDA products enable fast and convenient purification of recombinant polyhistidine-tagged proteins by immobilized metal ion affinity chromatography (IMAC). Both matrices are dry silica-based resins pre-charged with Ni²⁺ ions.

The chelating group of Protino® Ni-TED is based on TED (triscarboxymethyl ethylene diamine), a strong pentadentate metal chelator (Binding capacity of 10 mg/g resin). Protino® Ni-IDA is based on IDA (iminodiacetic acid) which is a threedentate chelator (Binding capacity of 20 mg/g resin).

Product Number	Description**	Pkg Size*	Price
MCN74510010	Protino® Ni-TED 150 Protein Binding Capacity: 400µg*	10 preps	\$50.20
MCN7451105	Protino® Ni-TED 1000 Protein Binding Capacity: 2.5mg*	5 preps	38.60
MCN7451205	Protino® Ni-TED 2000 Protein Binding Capacity: 5mg*	5 preps	50.20
MCN74515010	Protino® Ni-IDA 150 Protein Binding Capacity: 800µg*	10 preps	50.20
MCN7451605	Protino® Ni-IDA 1000 Protein Binding Capacity: 5mg*	5 preps	38.60
MCN7451705	Protino® Ni-IDA 2000 Protein Binding Capacity: 10mg*	5 preps	50.20

* Refers to 6xHis-GFPuv (32 kDa)

** Each kit includes packed columns and buffers. Protino® is also available in different package sizes and formats. Please contact our Technical Support Department for more information.

Isolate Total RNA and Protein from One Lysate

Macherey-Nagel's NucleoSpin® RNA/Protein Kit enables the isolation of RNA and proteins from diverse sample types, without splitting the sample prior to extraction.

Please contact our Technical Support Department for more information.

G-BIOSCIENCES FOCUS™ SubCell

Total subcellular fractionation of cells and tissues

The FOCUS™ SubCell Kit is designed for the total subcellular fractionation of cells and mammalian tissue into enriched fractions of nuclear, mitochondrial, cytosolic and membrane proteins.



The resulting mitochondrial fraction can be subsequently separated into heavy and light fractions by gradient centrifugation. The resulting mitochondria are >90% active and have intact inner and outer membranes.

- Fractionate into nuclear, mitochondrial, cytosolic and membrane proteins
- Adaptable for animal tissue
- Resulting fractions suitable for 2D electrophoresis and other applications
- Suitable for proteomic and cell signalling studies

Product Number	Description	Pkg Size	Price
GB786260	FOCUS™ SubCell	50 preps	\$293.10

G-Biosciences also offers kits that enable researchers to obtain different protein fractions.

These kits include FOCUS™ Membrane Proteins, FOCUS™ Mitochondria, FOCUS™ Signal Proteins, FOCUS™ Glycoproteins and FOCUS™ Cytoplasmic & Nuclear Proteins.

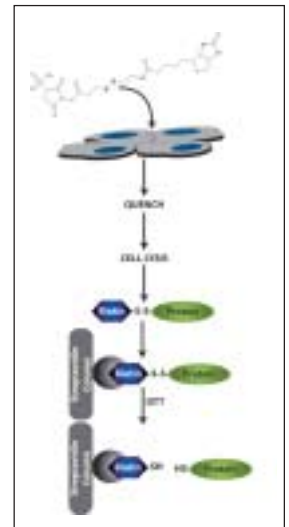
G-BIOSCIENCES HOOK™ CELL SURFACE PROTEIN ISOLATION

For the biotin labeling and subsequent isolation of cell surface proteins

The kit is compatible with a wide variety of mammalian cells and can be used to compare treated vs. untreated cells as well as differences between cell lines

Applications include:

- Cell surface protein isolation
- Receptor:ligand interaction studies
- Membrane trafficking studies



Product Number	Description	Pkg Size*	Price
GB786316	HOOK™ Cell Surface Protein Isolation Kit Includes: HOOK™ Sulfo-NHS-SS-Biotin Streptavidin-Agarose Columns with stoppers Collection Tubes, Mammalian Cell PE LB™ HOOK™ Quench Buffer Jaw™ Phosphate Buffered Saline and OneQuant™ DTT	5 rxns	\$208.60

* Supplied with sufficient reagents for 5 reactions with each reaction consisting of four 90-95% confluent T-75cm² flasks

SPECTRUM LABS Spectra/Por® Float-A-Lyzer® G2

- Screw-on Cap: Open & close for in-process sampling
Colour-coded for MWCO
- Polypropylene Silicon O-ring: Leak proof & resealable
- Floatation Ring: Device body inserts through center to maintain buoyancy in buffer
- Polyethylene Bottom Piece: Sealed and weighted for vertical orientation
- Polypropylene Membrane: 3 volume-specific sizes
- Potting: Polyurethane
- Sample Loading: Disposable pipette for 5 & 10 mL (included)
Pipette tip for 1 mL (not included)
- Membrane Type: Biotech grade Cellulose Ester (CE)



Spectra/Por® Float-A-Lyzer® — Pkg. Size: 12

MWCO	Colour Code	1 mL	5 mL	10 mL
3.5 – 5 kD	Black	STG235029 \$95.60	STG235053 \$101.30	STG235065 \$112.50
8-10 kD	Yellow	STG235031 \$95.60	STG235055 \$101.30	STG235067 \$112.50
20 kD	Red	STG235033 \$95.60	STG235057 \$101.30	STG235069 \$112.50
100 kD	Blue	STG235035 \$95.60	STG235059 \$101.30	STG235071 \$112.50



Spectra/Por® Tube-A-Lyzer®



*The First Sterile & Ready-to-Use
Dynamic-Dialysis Device for Fragile Samples*

- Designed for the rapid yet gentle separation of shear-sensitive solutes in large sample volumes
- Ready to use and disposable
- Sterile & pyrogen free
- Recirculating dialysate for rapid dialysis

Advantages of Dynamic Dialysis

- Maintains maximum concentration gradient
- Prevents polarization and membrane fouling
- Provides hypo-osmotic pressure to aid separation
- Achieves higher sample purities
- Reduces dialysis time from days to hours

Contact our Technical Support Department for more information.

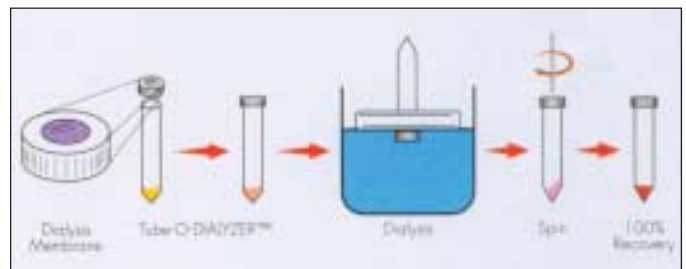
G-BIOSCIENCES Tube-O-DIALYZER™

No loss dialyzer for small and precious samples

- Eliminates the major concern when dialyzing small samples i.e. the loss of samples due to transfer in and out of dialysis bags and handling.
- A simple design converts a sample tube into a Tube-O-DIALYZER™. The tube cap is adapted with a dialysis membrane made of a neutral non-binding membrane.
- Place your sample in the tube and close the cap adapted with the dialysis membrane. Invert the Tube-O-DIALYZER™ in a dialysis tank and dialyze your samples.
- When dialysis is complete, spin the tube for a brief 5 seconds and collect 100% of your sample.
- After dialysis, replace the dialyzing cap with a normal cap for sample storage

Tube-O-DIALYZER™ — Pkg. Size: 50

MWCO	Micro		Medi	
	20-250µL		200µL - 2.5 mL Sample Size	
1000	GB7861411K	\$200.40	GB7861421K	\$224.80
4000	GB7861414K	200.40	GB7861424K	224.80
8000	GB7861418K	200.40	GB7861428K	224.80
15,000	GB78614115K	208.60	GB78614215K	224.80
50,000	GB78614150K	208.60	GB78614250K	230.60



* Each order of Tube-O-DIALYZER™ is supplied with 4 floats.

PROTEIN SEPARATION

OPTIMIZE OPTI-PAK® and OPTI-LYNX™ TRAP CARTRIDGES

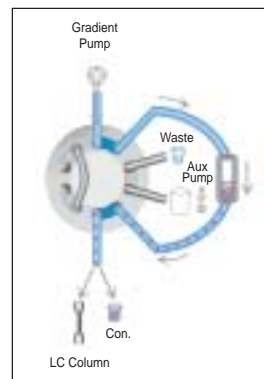
An elegant solution for HPLC or LC/MS analysis

- HPLC or LC/MS analysis often requires clean-up of protein samples
- Detergents or salts can affect the ionization process
- Dilute samples can be swamped out by background noise

Trap columns are small packed beds that use the adsorptive properties of analytes to concentrate, desalt, remove detergents, and more. Unlike off-line procedures that require significant sample handling and potential sample loss, on-line clean up increases recovery and allows automation.

Traps work on the principle of "digital chromatography." The proteins are fully bound or fully unbound. While the proteins are bound, matrix is swept to waste. The solvent is changed, and the proteins enter the analytical column without dilution or dispersion.

Optimize Technologies offers two lines of trap columns to suit any trapping need. The OPTI-PAK® capillary traps are designed for ultra-low volume applications. OPTI-LYNX™ traps offer higher capacity, as well as the OPTI-LYNX™ quick-connect hardware for the ultimate in connection simplicity or semi-automated clean-up.



OPTI-LYNX™ Trap Cartridges, Pkg. 5

Phase	Bed volume: 4µL Capacity: 16µg Sample volume: 1-800µL		Bed volume: 20µL Capacity: 80µg Sample volume: 4µL – 4 mL		Bed volume: 40µL Capacity: 160µg Sample volume: 8µL – 8 mL		Bed volume: 100µL Capacity: 400µg Sample volume: 200µL – 20 mL	
	Product Number	Price	Product Number	Price	Product Number	Price	Product Number	Price
C18	M1102868TA	\$383.60	M1102870TA	\$383.60	M1102872TA	\$383.60	M1102874TA	\$383.60
SCX	M1102868TB	383.60	M1102870TB	383.60	M1102872TB	383.60	M1102874TB	383.60
SAX	M1102868TE	383.60	M1102870TE	383.60	M1102872TE	383.60	M1102874TE	383.60
C8	M1102868TF	383.60	M1102870TF	383.60	M1102872TF	383.60	M1102874TF	383.60
C4	M1102868TG	383.60	M1102870TG	383.60	M1102872TG	383.60	M1102874TG	383.60
DVB (divinyl benzene)	M1102868TH	383.60	M1102870TH	383.60	M1102872TH	383.60	M1102874TH	383.60
DVB/SCX	M1102868DQ	383.60	M1102870DQ	383.60	M1102872DQ	383.60	M1102874DQ	383.60

OPTI-PAK® Trap Cartridges, Pkg. 5

Phase	Bed volume: 0.25µL Capacity: 1µg Sample volume: 0.05-50µL		Bed volume: 0.50µL Capacity: 2µg Sample volume: 0.1-100µL		Bed volume: 1µL Capacity: 4µg Sample volume: 0.2 - 200µL		Bed volume: 2µL Capacity: 8µg Sample volume: 0.4 - 400µL	
	Product Number	Price	Product Number	Price	Product Number	Price	Product Number	Price
C18	M1003324TA	\$513.70	M1003317TA	\$402.00	M1003225TA	\$402.00	M1003229TA	\$402.00
C8	M1003324TC	513.70	M1003317TC	402.00	M1003225TC	402.00	M1003229TC	402.00
C4	M1003324TD	513.70	M1003317TD	402.00	M1003225TD	402.00	M1003229TD	402.00
SCX	M1003324TE	513.70	M1003317TE	402.00	M1003225TE	402.00	M1003229TE	402.00
SAX	M1003324TF	513.70	M1003317TF	402.00	M1003225TF	402.00	M1003229TF	402.00
DVB (divinyl benzene)	M1003324TG	513.70	M1003317TG	402.00	M1003225TG	402.00	M1003229TG	402.00

Different bed volumes and custom phases are also available. Please contact the Chromatographic Specialties Technical Support Team at 1-800-267-8103.

OROCHEM PROTEIN CRASH AND PROTEIN PRECIPITATION FILTER PLATES

Simple, rapid, high throughput sample preparation

The graded frit design is optimized to efficiently remove precipitated protein without plugging or breakthrough. Protein precipitation can be accomplished *in-situ* in the plate wells, minimizing sample handling. Protein precipitate is removed by filtration, eliminating time consuming centrifugation and transfer steps.

- Suitable for plasma, serum and blood samples
- No acetonitrile leakage or crosstalk during mixing or incubation
- Eliminates cloudy extract
- No well blockage
- Only gentle mixing required
- Optimized for parallel processing and automation

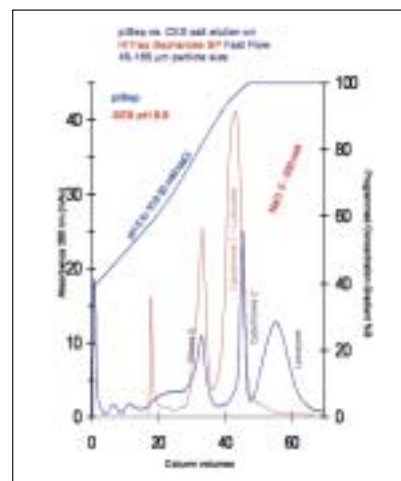


Product Number	Description	Pkg Size	Price
C61OROPCKITST	Protein Crash Plate Starter Kit Includes: Protein Crash Plate (2mL/well, 0.2µm cutoff), 5 Protein Crash Plate (1mL/well, 0.2µm cutoff), 5 96 Well Collection Plate, 1mL/well, PP, 5 Pierceable Capmat for 2.2mL/well plate, 5 Pierceable Capmats, Autosampler Friendly, 5 2-in-1 Vacuum Manifold, 1	Kit	\$1,473.20

Protein Crash Plates are also sold separately. Please contact our Technical Support Department for more information.

CryoBioPhysica plsep pH GRADIENT CHROMATOGRAPHY SYSTEM

plsep is a mobile phase system which enables fully controllable linear and nonlinear pH gradients and dual independent gradients (pH & NaCl, etc). plsep combines the resolution of isoelectric focusing with the capacity and automation of HPLC. plsep buffers are volatile, so you can use LC/MS detection to its fullest or retrieve proteins from preparative samples by evaporation alone.



plsep Separates Proteins Better than NaCl Gradient Elution

- Applicable to analytical and large scale preparative purifications of proteins
- Separates isoforms of immunoglobulins (even monoclonal antibodies possessing heterogeneously charged sugar chains)
- Separates protein isoforms differing by a single amino acid or species with variations in glycosylation
- Replaces salt-elution Ion Exchange Chromatography
- Reduces separation steps and eliminates all of the desalting steps associated with salt gradient chromatography
- Polishing step following: Affinity chromatography, Hydrophobic interaction chromatography, Reversed phase chromatography, Ion-exchange chromatography, Gel filtration chromatography
- Quality control - plsep can detect degradation or folding variants of proteins

Product Number	Description	Pkg Size	Price*
PI801S	plsep pH Gradient Maker Software (1 Manifold - NaCl default)	Each	\$595.00
PI802P	plsep pH Gradient Maker Pro Software (3 Manifolds - NaCl, Urea, Acetonitrile)	Each	1,354.00
PI803	plsep Buffer Kit	5L Preparation	514.00
PI804	plsep Buffer Kit	10L Preparation	1,626.00
PI805	plsep Buffer Kit	50L Preparation	2,711.00
PI806	plsep Buffer Kit	100L Preparation	4,065.00

* Discounts are available when purchasing software and buffer kit packages. Please contact our Technical Support Department for more information.

CHROMATOGRAPHIC SPECIALTIES INC. PROTEOMICS COLUMNS

For ion-exchange, reverse phase or chiral separations of proteins and other biomolecules, Chromatographic Specialties can find the right column for you.

Reverse Phase

- Hamilton
- PRP®-3
 - PRP®-Infinity

NUCLEOSIL®

- 300-5 C18
- 500-5 C18
- 300-5 C8
- 300-5 C4
- MPN

NUCLEOGEL® RP NUCLEOGEL® PPN

- Viva
- C18
 - C8
 - C4
 - Biphenyl
 - PFP Propyl

YMC-Pack

- ODS-A
- ODS-AQ
- CN
- C8
- C4
- PROTEIN-RP

- ZirChrom®
- DiamondBond®-C18
 - ZirChrom®-EZ
 - ZirChrom®-MS
 - ZirChrom®-SELECT
 - ZirChrom®-CARB
 - ZirChrom®-PDB
 - ZirChrom®-PS
 - Sachtopore®-RP
- ZORBAX
- 300SB-C18
 - 300SB-C8
 - 300SB-C3
 - 300SB-CN
 - 300Extend-C18
 - Poroshell 300SB-C18
 - Poroshell 300SB-C8
 - Poroshell 300SB-C3
 - Poroshell 300Extend-C18

Ion Exchange

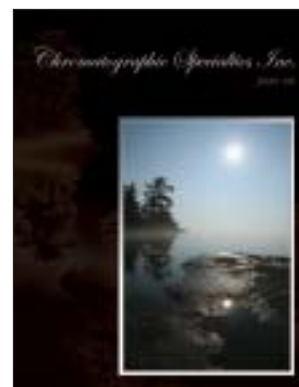
- NUCLEOGEN® DEAE
NUCLEOGEL® SAX
NUCLEOGEL® SCX
PRP®-X500
ZirChrom®-WCX
ZirChrom®-WAX
ZirChrom®-SAX
ZirChrom®-SHAX
ZirChrom®-PEZ
ZORBAX SCX

Chiral

- YMC CHIRAL NEA
ZirChrom®-Chiral LEU
ZirChrom®-Chiral NESA
ZirChrom®-Chiral PG

Size Exclusion

- Sachtopore®-NP
YMC-Pack Diol
ZirChrom®-PHASE
ZORBAX GF-250 and GF-450



For more information or to request a Chromatographic Specialties Catalogue, please contact:

1-800-267-8103 • tech@chromspec.com
• sales@chromspec.com • www.chromspec.com

PROTEIN CRYSTALLIZATION

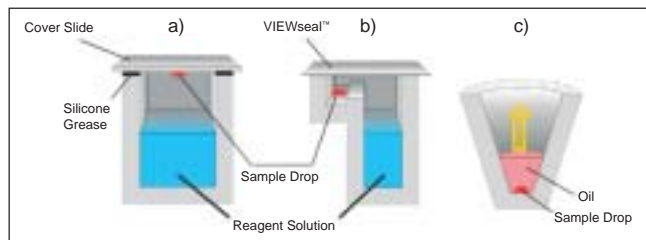
GREINER Bio-One CRYSTALSTAR™ PROTEIN CRYSTALLIZATION PLATES



An important method for the determination of protein structure is x-ray analysis of protein crystals. The determination of the three-dimensional structure of proteins has contributed towards major advances in basic research, particularly in the fields of structural genomics and structure-based drug design.

The most commonly used method for the crystallization of proteins is vapour diffusion, which comprises both the sitting drop and hanging drop methods. One drop of protein solution is mixed with one drop of reagent solution and incubated together with a larger volume of reagent solution in a sealed well. Concentration gradients between the sample drop and the reservoir solution are balanced out by diffusion, which induces the crystallization process if the correct conditions have been selected. The microbatch method in which the sample drop is covered with oil is also widely used. In this technique the choice of oil determines the rate of diffusion of the water in the sample drop through the oil.

Numerous factors affect the crystallization of proteins. Since the optimal crystallization conditions generally can't be predicted, a large number of attempts are often necessary in order to determine and optimize the appropriate conditions. Protein crystallization therefore still represents a major bottleneck in structure analysis. The use of high-throughput technologies, such as pipetting robots and standardized microplates makes it possible to test a large number of crystallization conditions in a short period of time and with relatively small amounts of protein. The **CrystalStar™** product range from Greiner Bio-One is a family of crystallization plates and accessories designed specifically for high throughput crystallization.



Crystallization Methods: a) Hanging Drop b) Sitting Drop c) Microbatch

Product Number	Description**	Number of Sample Wells	Number of Reservoirs	Special Features	Pkg Size	Price
Vapor Diffusion						
GR609150	CrystalDrop™ Lid	192	-	-	200	\$1,256.60
GR609050	CrystalDrop™ Lid	192	-	Pre-greased	40	1,077.10
GR662150	ComboPlate™	-	24	-	24	76.10
GR662050	ComboPlate™	-	24	Pre-greased	24	224.40
GR662850	ComboPlate™	-	24	LBR*	24	159.70
GR609101	CrystalQuick™ SW (Square Wells)	288	96	-	40	551.90
GR609801	CrystalQuick™ SW (Square Wells)	288	96	LBR*	40	611.80
GR609130	CrystalQuick™ Plus SW (Square Wells)	288	96	Hydrophobic	40	551.90
GR609830	CrystalQuick™ Plus SW (Square Wells)	288	96	LBR*, hydrophobic	40	611.80
GR609120	CrystalQuick™ RW (Round Wells)	288	96	-	40	551.90
GR609820	CrystalQuick™ RW (Round Wells)	288	96	LBR*	40	611.80
GR609171	CrystalQuick™ LP (Low Profile)	96	96	-	80	1,019.00
GR609871	CrystalQuick™ LP (Low Profile)	96	96	LBR*	80	1,223.60
GR609180	CrystalQuick™ Plus LP (Low Profile)	96	96	Hydrophobic	80	1,019.00
Microbatch						
GR653102	Terasaki Plate	60	-	-	580	\$488.30
GR654102	Terasaki Plate	72	-	-	270	228.20
GR673170	IMP@CT™ Plate	96	-	-	40	530.20
GR673096	IMP@CT™ Plate	96	-	µClear® film bottom	40	625.20
GR790801	IMP@CT™ Plate	1536	-	LBR*	60	1,938.80
Accessories						
GR676070	VIEWseal™, plate sealer	-	-	-	100	\$216.80
GR662145	CrystalBridge™	-	1	-	100	86.10
GR501870	Coverslip, 18mm Ø	-	-	Glass, silicized	1000	361.00
GR503870	Coverslip, 22mm Ø	-	-	Glass, silicized	1000	400.50

* LBR: Low Birefringence. Designed for the use of polarized light.

** With the exception of Terasaki plates, all crystallization plates have a footprint conforming to the ANSI/SBS 1-2004 Standard.

MJS BIOLYNX INC. CUSTOM SERVICES



Customized products and services to meet your research needs

In partnership with qualified suppliers, MJS BioLynx offers a wide range of products and services that are customized to meet your life science research needs.

GENTEL BIOSCIENCES CUSTOM SERVICES



Protein Array Sample Processing

Gentel's sample testing service is a fast, convenient way to obtain quantitative results using multiplex protein analysis. Gentel's scientists will process and analyze your samples on the arrays of your choice. They provide a Class 10,000 room to process your samples in a Good Laboratory Practices facility.

Contract Array Service

Gentel provides custom arraying with your specific antibodies or antigens. Proteins can be arrayed using either solid pins or non-contact piezo ceramic dispensers.

Available formats:

- Bar coded 1 x 3 inch slides
- Fully coated slides
- 96 well coated 3 x 5 inch plates

Custom Assay Development

Gentel provides high quality multiplex immunoassays that are validated to eliminate non-specific antigen or antibody binding and deliver exceptional dynamic range and reliable precision. Their access to high affinity antibodies and recombinant antigens combined with their core competency in multiplex immunoassay development results in exceptional immunoassay sensitivity with up to five logs of dynamic range.

PROTEIN BIOTECHNOLOGIES CUSTOM SERVICES

Semi-Custom and Custom Protein Microarray Services

Semi-custom protein microarrays can be fabricated using protein lysates from Protein Biotechnologies' extensive library of human clinical specimen lysates. This allows maximum flexibility to specifically select the tissue lysates that most interest you.



Custom protein microarrays can be fabricated with antibodies, synthetic peptides, recombinant proteins or other cell and tissue lysate preparations. These materials can be either user-supplied or Protein Biotechnologies can assist you in obtaining the required materials. Their experienced staff will help with microarray design and fabrication for your screening project.

Through the expertise of our suppliers, we are able to provide you with the flexibility, individualized service and quality products you require for your research. Please contact our Technical Support Department for more information.

ABGENT CUSTOM SERVICES



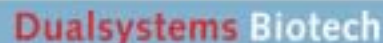
Protein Expression Services

Abgent has a custom protein expression service for both bacterial and baculoviral systems. Abgent's highly trained technical support staff will work with you to ensure that at the completion of this service, the quantity, bioactivity, structure, post translational modifications and purity of the protein expressed will meet your specifications. Abgent accomplishes this by using an exclusive in house custom service database tracking system that will allow them to closely monitor your projects status and data reports.

Peptide Synthesis

Abgent offers a reliable and high quality solution to the challenges faced with peptide design, synthesis and purification. The standard peptide synthesis is carried out using Fmoc-solid phase chemistry. For the synthesis of peptides that are long or difficult to produce, Abgent utilizes a modified chemistry that significantly improves the purity and yield of these challenging peptides. All peptides are visually inspected using liquid chromatography mass spec analysis.

DUALSYSTEMS CUSTOM SERVICES



Protein Interaction Screening Services

Dualsystems Biotech's custom protein-protein interaction services are an easy, low risk outsourcing solution for researchers. They offer the DUALhybrid, DUALmembrane and DUALhunter screening services as well as custom cDNA library construction.

- No need to buy reagents, media and special equipment
- Ideal for researchers with no prior yeast experience
- Ready-to-use results in just 3-4 months
- Profit from Dualsystems' expertise in yeast-based protein interaction screening
- No claim on intellectual property of results

Choose the screening service that is right for you:

DUALhybrid

- Cytosolic Proteins
- Protein Fragments or Domains

DUALmembrane

- Integral Membrane Proteins

DUALhunter

- Membrane Associated Proteins
- Nuclear Proteins and Acidic Proteins
- Self-Activating Proteins

The custom screening process:

1. Customer provides the cDNA encoding the protein of interest.
2. Customer selects a cDNA library to be screened from the Dualsystems collection or cDNA library construction.
3. Dualsystems performs the entire screening process.
4. Customer receives sequences of all positive clones, BLAST analysis and plasmid DNA of all positive clones.

Custom cDNA Library Construction

The custom library construction service is designed for researchers that are working with special tissues, cells, and total or poly A+ RNA. The library can be cloned into DUALmembrane, DUALhunter and DUALhybrid vectors, or a vector of your choice.

NEWSLETTER . . .

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www.biolynx.ca

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