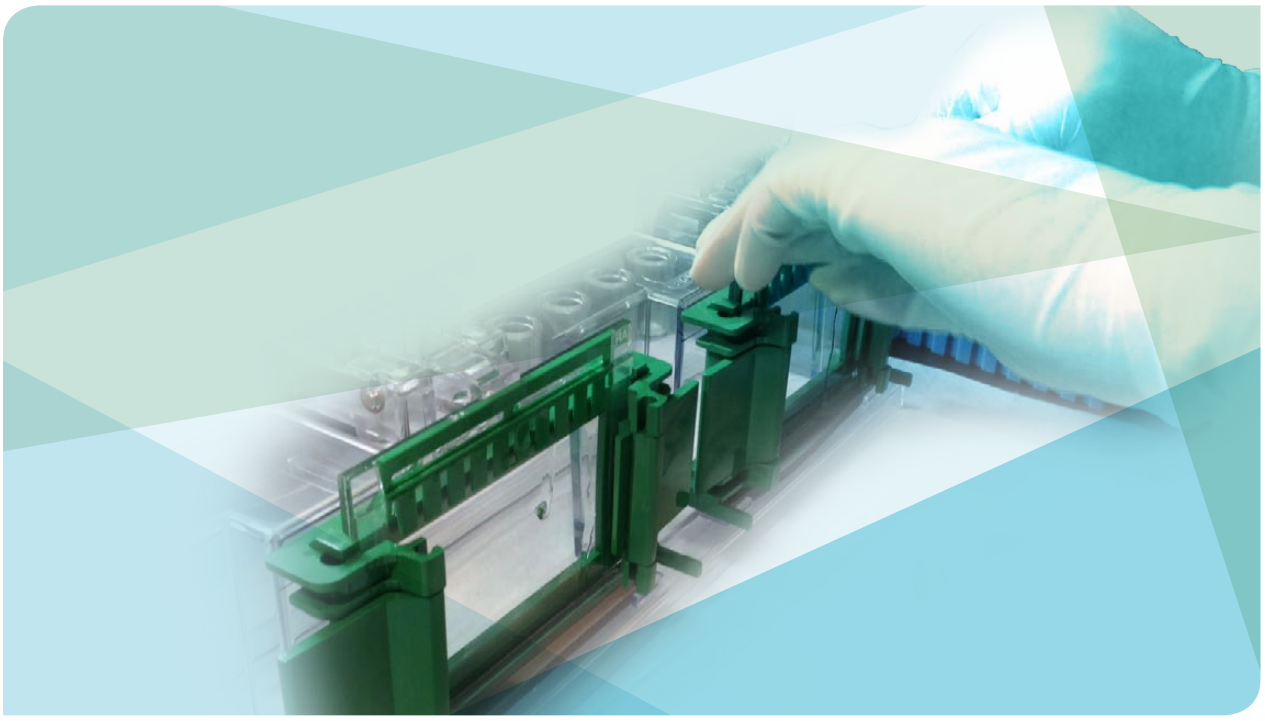


NEW KITS

FastCast™ Acrylamide Kits and Handcasting Equipment

Explore the latest frontier in gel electrophoresis

BIO-RAD

Hand cast gels with confidence and obtain quality results faster than ever with the most advanced chemistry in gel electrophoresis.

For more than 40 years, Bio-Rad has been supporting the hand casting of electrophoresis gels with products that have set the standard for excellence in protein electrophoresis. The new TGX™ and TGX Stain-Free™ FastCast™ acrylamide kits are Bio-Rad's newly released products aimed at accelerating research and providing the highest quality and confidence in results. When used together with the Mini-PROTEAN® or Criterion™ system, casting and running gels has never been easier.

NEW TGX and TGX Stain-Free FastCast Acrylamide Kits

Designed specifically to fit the needs of those who hand cast gels, the new, easy-to-use TGX and TGX Stain-Free FastCast acrylamide kits provide high performance and great convenience. TGX and TGX stain-free chemistry offer the most advanced technology in protein gel electrophoresis, enabling the fastest electrophoretic separation as well as fast and efficient transfers. Moreover, TGX gels, once cast, last 1 month. They are ready and available for use when needed; hence, less planning on the part of the user. The TGX Stain-Free FastCast kits have the added benefit of fast (≤5 min) protein band visualization without an extra staining step. Even with these added benefits, TGX and TGX stain-free chemistry still allow for use of well accepted, cost-effective traditional buffers.

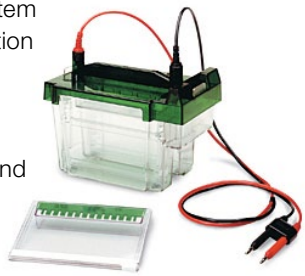
Mini-PROTEAN Gel Electrophoresis System

The Mini-PROTEAN system includes a versatile, easy-to-use Tetra cell, ideal for your mini gel electrophoresis and blotting needs. It is easy to assemble, leakproof, robust, and accommodates up to four handcast, Mini-PROTEAN precast, or Ready Gel® precast gels. With the optional Mini Trans-Blot® module, conveniently blot gels using the same cell.

The Tetra cell is available with handcasting modules and accessories, and with various options for hand casting from 0.75 to 1.5 mm thick mini-gels. For ultimate ease of hand casting, Mini-PROTEAN empty preassembled plastic cassettes are also an option for use with the Tetra cell.

Criterion Gel Electrophoresis System

The Criterion gel electrophoresis system ensures easy electrophoretic separation using midi format precast gels or 1 mm thick handcast gels. Criterion empty cassettes are designed for ultimate ease and simplicity when hand casting, ensuring leakproof casting, and can be run as single gels without buffer dams.

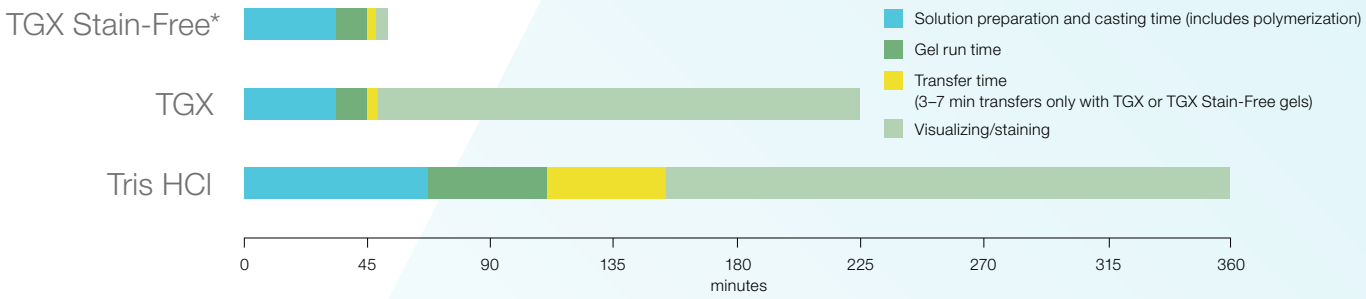


Blotting Systems

Bio-Rad has various options for high-efficiency blot transfers. For those performing western blotting using mini-sized gels, the Mini Trans-Blot module is designed to fit into the Tetra cell for convenience. At the midi-sized gel level, the Criterion blotter is designed with a unique blot assembly tray to aid in blot sandwich setup. Bio-Rad's newest semi-dry blotter, the Trans-Blot® Turbo™ transfer system, enables fast (3–7 min), efficient transfers for four mini or two midi gels utilizing minimal buffer. Filter paper, membranes, and buffer packs for the Trans Blot Turbo system come in ready-to-use packs for the most convenience and in value bulk consumable versions.

For more information on Bio-Rad's electrophoresis systems, refer to the Life Science Research product catalog or go to **www.bio-rad.com/proteinElectroBlot**.

Added Benefits of Stain-Free Technology



*** Added benefits of TGX Stain-Free gels:**

- No stain needed to visualize protein bands
- ≤5 min visualization and imaging

NEW TGX and TGX Stain-Free FastCast Acrylamide Kits

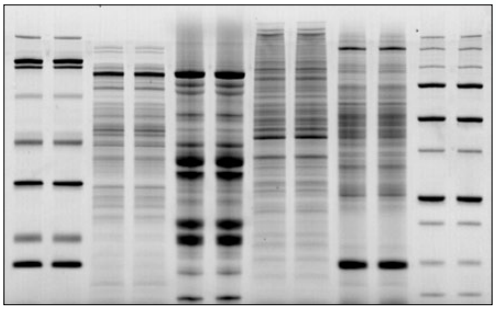
TGX and TGX Stain-Free FastCast acrylamide kits produce gels that are ideal for a variety of protein separation applications used in labs focused on protein identification and characterization, protein expression, protein purification, crystallography, 2-D electrophoresis, mass spectrometry, and other protein applications.

TGX and TGX Stain-Free FastCast acrylamide kits retain many of the features of TGX and TGX Stain-Free precast gels

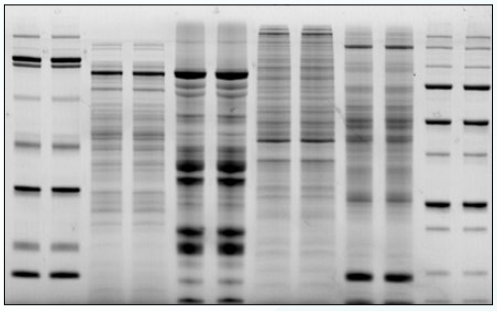
- Run times as short as 20 min
- Transfers in as little as 3 min using the Trans-Blot Turbo system
- High transfer efficiency
- Run gels with traditional, cost-effective Tris/glycine/SDS buffers
- Image gels and blots (after transfer) in <5 min without staining (TGX Stain-Free)

Features unique to FastCast acrylamide kits

- Shelf life of handcast gels is 1 month at 4°C, eliminating need to cast every week or on day of experiment
- Shelf life of acrylamide solutions is 1 yr at room temperature
- Electrophoresis run can begin as soon as 30 min after casting



A. 12% TGX Stain-Free FastCast acrylamide hand cast gel



B. 12% Criterion™ TGX Stain-Free™ precast gel

FastCast acrylamide solutions can be cast in traditional glass plates or preformed, ready assembled plastic cassettes, retaining the same performance as precast gels. Comparison of handcast 12% TGX Stain-Free FastCast acrylamide gel and 12% Criterion TGX Stain-Free precast gel shows similar performance. **A**, 12% TGX Stain-Free FastCast acrylamide handcast gel in Criterion plastic cassette. **B**, 12% Criterion TGX Stain-Free precast gel.

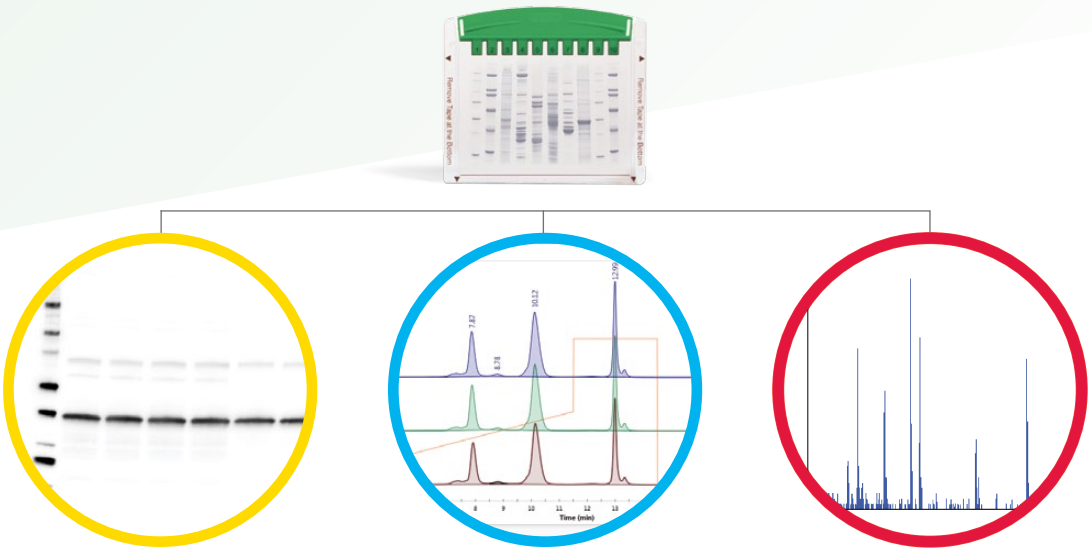
NEW TGX Stain-Free FastCast Acrylamide Kits Offer Additional Benefits

- No added fix/stain/destain reagents and time necessary
- No additional steps needed to visualize protein bands. Visualize protein bands within 5 min after gel run
- Allow researchers to easily check the success of the electrophoresis and transfer steps in their western blotting or other workflows
- Proteins of interest can be detected and visualized prior to costly and time-consuming downstream steps
- Shortened workflows: cast gels in 30 min, run separations in 20 min, and detect protein bands in ≤5 min

How does stain-free technology work?

The embedded compound in stain-free gels is activated by Bio-Rad stain-free enabled imagers to provide a fluorescence signal sensitivity that is equivalent to Coomassie staining. Image stain-free gels, post-electrophoresis, with a Bio-Rad imager by selecting Stain-Free Gel in Image Lab™ software.

STAIN-FREE TECHNOLOGY



WESTERN BLOTTING
Increase confidence with rapid checkpoints for separation and transfer and get accurate quantitation using total protein normalization.

CHROMATOGRAPHY
Quickly verify protein fraction purity during method development and routine chromatography without any messy, time-consuming staining steps.

MASS SPECTROMETRY
Improve ease of processing and time to results by removing manual staining and destaining steps and allowing for quick visualization of gels.

What stain-free technology resources are available?

Tips on normalization with stain-free technology and quantitative western blotting:

Western Blot Normalization Using Image Lab Software: **www.bio-rad.com/lit/6434.pdf**

General V3 Western Workflow Blotting Protocol: **www.bio-rad.com/lit/6390.pdf**

A Method for Greater Reliability in Western Blot Loading Controls: **Stain-Free Total Protein Quantitation: www.bio-rad.com/lit/6360.pdf**

V3 Stain-Free Technology Publications: **www.bio-rad.com/lit/6351.pdf**

Protein Blotting Guide: **www.bio-rad.com/lit/2895.pdf**

Troubleshooting: **www.bio-rad.com/tech/westernblotdoctor**

Stain-Free Use in Western Blotting

Stain-free technology can be utilized in various gel applications. In western blotting, stain-free gels enable you to monitor the success of each step in less than 5 minutes without the use of extra stain or staining steps. Further, stain-free technology enables total protein normalization without use of any membrane stains or housekeeping proteins.

Separate Proteins

Run gel in 20 min

Visualize Separation

Visualize separations of proteins in 1 min with stain-free imaging

Transfer Proteins

Transfer in 3–7 min

Access Transfer Efficiency

Visualize post-transfer gel with stain-free imaging

Verify Transfer Efficiency

Visualize blot (post-transfer) with stain-free imaging

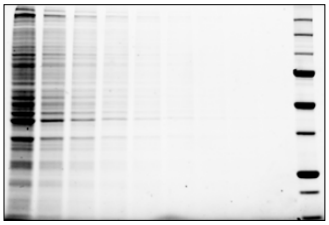
Blot Detection

Detect protein of interest using Clarity™ western ECL substrate

Validate Data by Normalization Analysis

Normalize protein of interest with stain-free image of blot from Step 4

Did my gel run successfully?

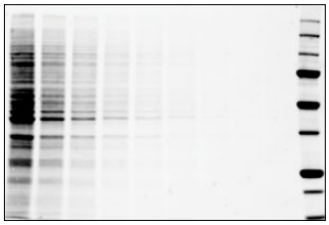


Stain-free image upon completion of gel electrophoresis (workflow step 2)

How much protein was left behind?

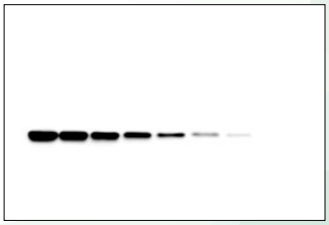
Stain-free image of post-transfer gel (workflow step 3)

Did most of my proteins transfer to the membrane?



Stain-free image of membrane post-transfer (workflow step 3)

Blot developed



Final chemiluminescent blot development (workflow step 5)

Mini-PROTEAN Gel Electrophoresis System

Configurations for Many Applications

Interchangeable modules easily convert a Mini-PROTEAN Tetra cell from one application to another. Each module fits into the same buffer tank and lid to form a complete cell. For higher throughput and fastest blotting, the Trans-Blot Turbo blotter is available.

- Mini-PROTEAN Tetra electrophoresis cell modules for running handcast or precast gels for 1-D and 2-D protein separations and nucleic acid PAGE separations
- Mini Trans-Blot electrophoretic transfer cell — for transferring proteins from gels to PVDF or nitrocellulose membranes
- Trans-Blot Turbo semi-dry blotter is available for the fastest (3–7 min) transfers of 4 mini or 2 midi gels at a time, using TGX or TGX Stain-Free gels

Empty Mini-PROTEAN preassembled plastic cassettes available in 50 packs. Select from 10, 12, 15, and IPG well formats and corresponding combs. Wells are outlined and numbered for easy loading. See accessories tab on **www.bio-rad.com/tetra**.

To configure your own electrophoresis cell, order the Mini-PROTEAN Tetra cell (catalog #165-8004) for running 1–4 gels, and order handcasting accessories separately, or select one of our complete Tetra preset configurations (catalog #165-8001, #165-8006, or #165-8000) based on required gel thickness.

Loading and Running Innovations

- Cell runs 1–4 gels using 1–2 running modules
- Improved core design with patented wing closures facilitates easier assembly and prevents buffer leakage
- Sample loading guides* allow easy sample loading and help prevent skipping or reloading lanes

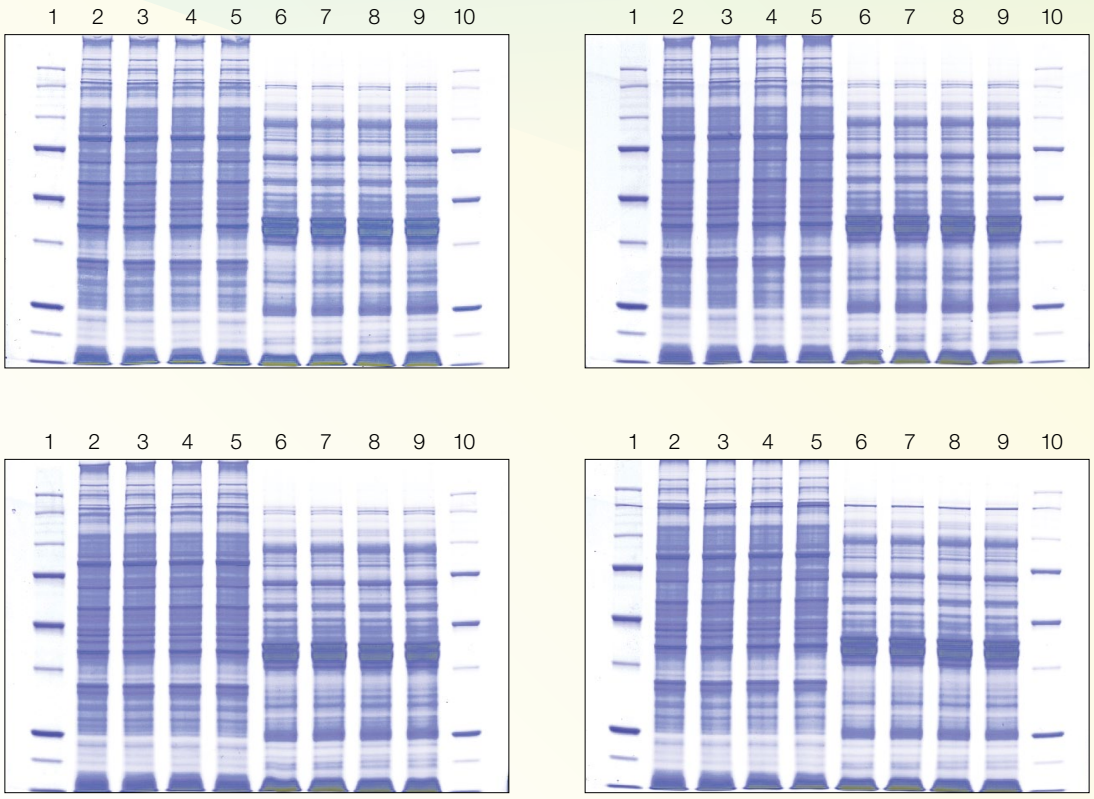
Casting Advantages

- Casting frames with simple cam closure provide precise alignment on any flat surface
- Patented side-by-side casting stand** allows access to two gels simultaneously. The spring-loaded lever creates a tight seal against the silicone gaskets to ensure leak-free casting
- Ground-glass plates with permanently bonded spacers enable perfect alignment and leak-free casting
- Glass plates and combs are labeled with thickness and number of wells for instant identification
- Innovative plastic combs** have a built-in ridge to eliminate air contact during gel casting for uniform gel polymerization
- For added convenience over traditional glass plates, use Mini-PROTEAN empty preassembled plastic cassettes for 1 mm thick gels. These cassettes ensure leakproof gel casting and have preprinted and numbered wells for easy loading of samples.

* U.S. Patent 5,656,145. ** U.S. Patent 6,162,342.

Mini-PROTEAN Tetra cell components:
1. Lid.
2. Tank.
3. Electrode assembly.
4. Companion running module.
5. Mini Trans-Blot module.
6. Casting stand.
7. Casting frame.
8. Sample loading guides.
9. Short plates.
10. Spacer plates.
11. Combs.
12. Mini-PROTEAN empty preassembled cassette.

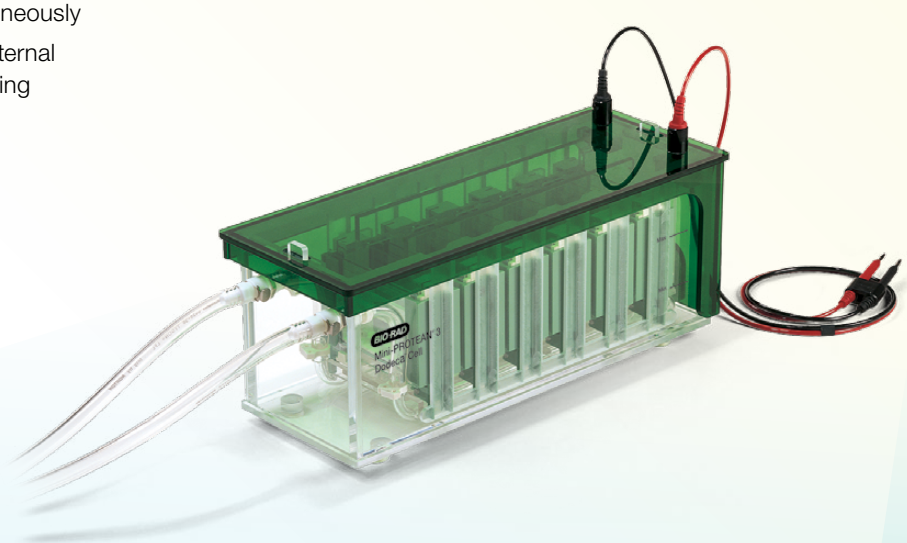
Reproducibility and Throughput



High-throughput and reproducible protein separation using the Mini-PROTEAN Tetra electrophoresis system. Four Mini-PROTEAN 10% TGX precast gels were run using the Mini-PROTEAN Tetra system. Lanes 1 and 10, Precision Plus Protein™ unstained protein standards; lanes 2–5, *E. coli*; lanes 6–9 HeLa cell lysate. The gels were run at 200 V followed by staining with Bio-Safe Coomassie stain. Images were acquired with a Bio-Rad calibrated densitometer.

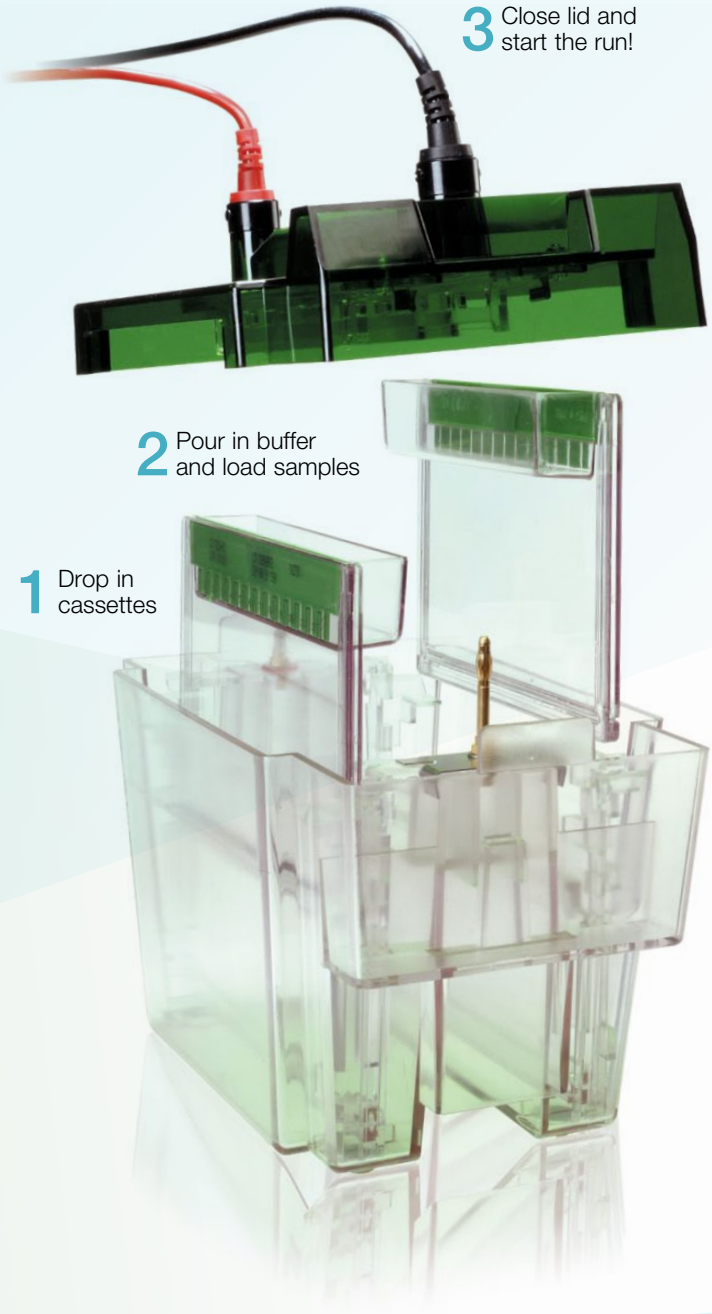
Mini-PROTEAN 3 Dodeca Cell Features

- Capacity to run up to 12 mini gels simultaneously
- Built in cooling coil that attaches to an external refrigerated circulator to prevent overheating
- Convenient buffer draining using built-in quick-connect drain port
- Compact footprint



Criterion Gel Electrophoresis System

The Criterion gel electrophoresis system ensures easy electrophoretic separation using midi format and 1 mm thick gels. Criterion empty cassettes are designed for ultimate ease and simplicity when hand casting. The cassettes ensure leak-proof casting and can run single gels without buffer dams. For blotting applications, the Criterion blotter is available for wet tank blotting, or for the fastest (7 min) transfers using TGX or TGX Stain-Free gels, the Trans-Blot Turbo semi-dry blotter can be used to transfer 2 midi-sized blots at a time.



The Standard in Midi-Sized Gel Systems

The Criterion system is a revolutionary midi precast gel electrophoresis system that is remarkably easy to use with available empty Criterion plastic cassettes for leakproof easy hand casting.

The innovation behind the Criterion system is the cassettes' integrated buffer chamber,* which simplifies assembly and ensures that the system will never leak. Locator slots for the cassettes allow for simple alignment without hassles or bulky clamps. A single gel or two gels can be run without the need for buffer dams. Replaceable electrode carriers with prestrung platinum wires make electrode changes easy.

Safe and Easy-to-Open Cassettes

The Criterion cell lid features a built-in wedge that opens Criterion gel cassettes easily and consistently in one simple step with no extra tools necessary.

Open cassettes using the Criterion cell lid.

The Combs You Need

The Criterion system features five comb options, including three multi-well formats (12+2-, 18-, and 26-well), an IPG+1 (for 2-D electrophoresis), and a Prep+2.

J-Foot Cassette Design

The J-foot* design at the lower edge of the cassette allows the gel to be lifted and transferred easily from the cassette.

Gel Loading Made Easier

The Criterion system makes it easy to see and load wells with outlined and numbered wells printed on each gel cassette.

Separate More Samples in Fewer Runs

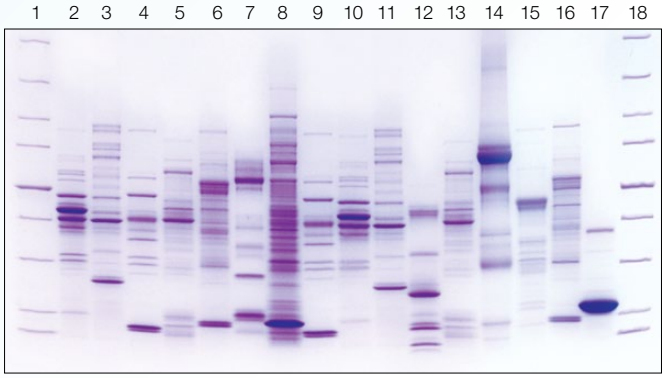
Criterion gels offer the sample capacity to outperform any other gel system. We offer the Criterion empty cassettes in all of the comb formats available with precast gels, including reference wells.

Resolve More Proteins on Every Gel

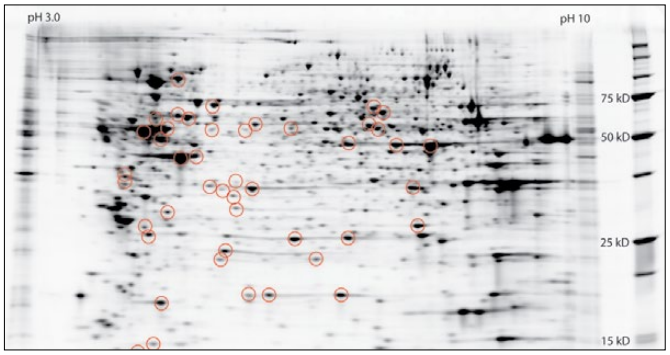
The Criterion system together with ReadyStrip™ IPG strips can provide more 2-D spots on a single gel than any other small format 2-D system. Criterion IPG combs have a separate well for standards and are designed to hold 11 cm ReadyStrip IPG strips, providing 35% more focusing area in the first-dimension separation and 20% more gel area in the second dimension. Run 12 gels at once on a Criterion™ Dodeca™ cell with the confidence that you'll get consistent, sharply resolved spots every time.

* U.S. Patent 6,093,301.

See All Your Data on One Gel, Not Two



See all your data on one gel, not two. An 18-well Criterion gel is capable of running twice as many samples as a standard mini gel. Lanes 1 and 18, Precision Plus Protein electrophoresis standards; lanes 2 and 10, chicken extract; lanes 3 and 11, shrimp extract; lanes 4 and 9, fish extract; lanes 5 and 13, ADH; lanes 6 and 16, catalase; lane 7, snake venom; lane 8, *E. coli* lysate; lane 12, peroxidase; lane 14, raccoon serum; lane 15, urease; lane 17, myosin.



Resolve more proteins on a single small format gel. 48 spots were selected from a Criterion gel for MALDI-TOF-MS analysis. 100 µg HeLa cell lysate separated on 11 cm ReadyStrip IPG strip (pH 3–10 NL) followed by 2-D separation on 8–16% Criterion TGX Stain-Free gel.

Empty plastic Criterion gel cassettes (run exclusively on Criterion cells) with integral buffer chamber, premarked wells in 12+2-, 18-, 26-well, and IPG formats can be used to cast 13.3 x 8.5 cm (W x L), and 1.0 mm thick gels.

The Criterion cell runs 1 or 2 Criterion gels. Lower buffer chamber holds 720 ml; upper buffer chamber/gel cassette chamber holds 60 ml.

The Criterion blotter is highly efficient, transferring most proteins in 30 min to 1 hr and has a unique gel blot assembly tray for easy setup.

The Criterion Dodeca cell runs up to 12 gels. Runs with 6 L of buffer.

Ready-to-Run Buffers and Solutions

Bio-Rad is a premier provider of buffers and premixed reagents for life science research. We offer a variety of different products for all your protein and nucleic acid experiments. Whether you need powdered reagents or premixed solutions, Bio-Rad reagents meet the highest quality standards to ensure consistency and reliability in your experiments.

NEW Acrylamide Solutions and Tris Buffers for Gel Casting

Bio-Rad offers a variety of prepared solutions for casting polyacrylamide gels. Our new TGX and TGX Stain-Free FastCast acrylamide kits bring the latest gel chemistry to hand casting of gels, producing high-quality gels that last up to 1 month at 4°C after casting and enabling 20 minutes electrophoresis and 3 to 7 minutes transfers, yet still utilizing traditional, cost-effective Laemmli-based buffers. These kits offer the easiest format for hand casting and have a shelf life of 1 year at room temperature (22–28°C).

Bio-Rad also continues to provide traditional Tris buffers and acrylamide solutions for preparing SDS-PAGE gels. High-purity reagents and carefully controlled manufacturing conditions allow acrylamide solutions to be stable for 1 year at 4°C.

Electrophoresis Buffers

With premixed electrophoresis running buffers, standardize your electrophoresis runs and save on preparation time while avoiding mistakes in buffer concentration. Bio-Rad buffers are made with high-purity water and pure reagents, ensuring the highest quality. Premixed buffers are available for a variety of protein and nucleic acid electrophoresis protocols.

Our 5 L boxes offer tremendous economic and convenience advantages. They are compact and stackable to save benchspace, and are designed with an easy-pour spout.

Blot Processing Buffers

The processing of blots for protein and nucleic acid detection is now even simpler with a variety of premixed wash buffers and blocking solutions. Premixed blocking buffers, available as TBS/casein and PBS/casein, take the time and effort out of solubilizing casein. Premixed wash buffers in TBS, PBS, and SSC reduce the number of stock solutions to prepare. 10% Tween 20 makes pipetting accurate and simple.

Sample Loading Buffers

Premixed loading buffers remove variables that cause lane-to-lane running anomalies. And since no preparation is required, you save valuable time as well. Bio-Rad premixed sample buffers are available for numerous applications, including native PAGE, SDS-PAGE, peptide analysis, analytical IEF, nucleic acid sample preparation (denaturing and nondenaturing), and zymogram gel sample preparation.

Blot Transfer Buffers

The transfer buffer must facilitate both effective elution from the gel matrix and effective binding of the protein or nucleic acid to the membrane. Determine your choice of buffer by the type of gel or membrane and the physical characteristics of the molecules of interest.

SDS Solutions

Detergents are employed in electrophoresis when it is necessary to disrupt protein-lipid or protein-protein interactions. SDS is the most common detergent used in PAGE analysis because most proteins are readily soluble in it. Bio-Rad SDS solutions are highly purified — an important feature, since impurities in SDS have unpredictable effects on electrophoretic mobilities.

Electrophoresis Buffer Reagents

In case you would like to prepare everything yourself, we offer a complete line of reagents. Our classic electrophoresis powder reagents are the ultimate in quality.

Ordering Information

Catalog #	Description
Gel Casting Solutions and Reagents	
161-0170	**TGX FastCast Acrylamide Starter Kit**, 7.5%
161-0171	**TGX FastCast Acrylamide Kit**, 7.5%
161-0172	**TGX FastCast Acrylamide Starter Kit**, 10%
161-0173	**TGX FastCast Acrylamide Kit**, 10%
161-0174	**TGX FastCast Acrylamide Starter Kit**, 12%
161-0175	**TGX FastCast Acrylamide Kit**, 12%
161-0180	**TGX Stain-Free FastCast Acrylamide Starter Kit**, 7.5%
161-0181	**TGX Stain-Free FastCast Acrylamide Kit**, 7.5%
161-0182	**TGX Stain-Free FastCast Acrylamide Starter Kit**, 10%
161-0183	**TGX Stain-Free FastCast Acrylamide Kit**, 10%
161-0184	**TGX Stain-Free FastCast Acrylamide Starter Kit**, 12%
161-0185	**TGX Stain-Free FastCast Acrylamide Kit**, 12%
161-0800	**TEMED**, 5 ml
161-0700	**Ammonium Persulfate (APS)**, 10 g
Electrophoresis Cells	
165-8000	**Mini-PROTEAN Tetra Cell**, 10-well, 0.75 mm thickness
165-8001	**Mini-PROTEAN Tetra Cell**, 10-well, 1.0 mm thickness
165-8006	**Mini-PROTEAN Tetra Cell**, 10-well, 1.5 mm thickness
165-4100	**Mini-PROTEAN 3 Dodeca cell**
165-4130	**Criterion Dodeca cell**
165-4139	**Criterion Dodeca cell and PowerPac Universal Power Supply**
Mini-PROTEAN and Criterion Empty Cassettes and Combs	
456-0003	**Mini-PROTEAN Empty Cassettes**, 1.0 mm thick, 10-well, pkg of 50
456-0005	**Mini-PROTEAN Empty Cassettes**, 1.0 mm thick, 12-well, pkg of 50
456-0006	**Mini-PROTEAN Empty Cassettes**, 1.0 mm thick, 15-well, pkg of 50
456-0001	**Mini-PROTEAN Empty Cassettes**, 1.0 mm thick, IPG well, pkg of 50
456-0013	**Mini-PROTEAN Combs**, 10-well, Pkg of 50, for use with 456-0003
456-0015	**Mini-PROTEAN Combs**, 12-well, Pkg of 50, for use with 456-0005
456-0016	**Mini-PROTEAN Combs**, 15-well, Pkg of 50, for use with 456-0006
456-0011	**Mini-PROTEAN Combs**, IPG well, Pkg of 50, for use with 456-0001
345-9901	**Criterion Empty Cassettes**, 1 mm, 12+2-well, pkg of 10
345-9902	**Criterion Empty Cassettes**, 1 mm, 18-well, pkg of 10
345-9903	**Criterion Empty Cassettes**, 1 mm, 26-well, pkg of 10
345-9904	**Criterion Empty Cassettes**, 1 mm, prep+2-well, pkg of 10
345-9906	**Criterion Empty Cassettes**, 1 mm, IPG+1-well, pkg of 10
AnyGel™ Stands	
165-4131	**AnyGel Stand**, Pkg of 1, single-row gel stand, holds 1 PROTEAN® gel, 2 Criterion gels, or 3 Mini-PROTEAN or Ready Gel precast mini gels
165-5131	**AnyGel Stand**, Pkg of 1, 6-row gel stand, holds 1 PROTEAN gel, 12 Criterion gels, or 18 Mini-PROTEAN or Ready Gel precast mini gels

Catalog #	Description
Blotting Systems	
170-3935	**Mini Trans-Blot Module**, without lower buffer tank and lid, for use with the Mini-PROTEAN Tetra cell
170-4155	**Trans-Blot Turbo Transfer Starter System**, blotting instrument, includes base, 2 cassettes to hold 1–2 midi or up to 4 mini blotting sandwiches, blot roller, and starter consumable kit
170-4156	**Trans-Blot Turbo Transfer Pack**, mini, PVDF, pkg of 10
170-4157	**Trans-Blot Turbo Transfer Pack**, midi, PVDF, pkg of 10
170-4158	**Trans-Blot Turbo Transfer Pack**, mini, nitrocellulose, pkg of 10
170-4159	**Trans-Blot Turbo Transfer Pack**, midi, nitrocellulose, pkg of 10
170-4270	**Trans-Blot Turbo RTA Transfer Kit**, ready-to-assemble, mini, nitrocellulose, pkg of 40
170-4271	**Trans-Blot Turbo RTA Transfer Kit**, ready-to-assemble, midi, nitrocellulose, pkg of 40
170-4272	**Trans-Blot Turbo RTA Transfer Kit**, ready-to-assemble, mini, PVDF, pkg of 40
170-4273	**Trans-Blot Turbo RTA Transfer Kit**, ready-to-assemble, midi, PVDF, pkg of 40
170-4274	**Trans-Blot Turbo RTA Transfer Kit**, ready-to-assemble, mini, LF PVDF, pkg of 40
170-4275	**Trans-Blot Turbo RTA Transfer Kit**, ready-to-assemble, midi, LF PVDF, pkg of 40
Detection Reagent	
170-5060	**Clarity Western ECL Substrate**, 200ml
Protein Standards	
161-0396	**Precision Plus Protein Unstained Standards Value Pack**, 10–250 kD, 5 x 1,000 µl, 500 applications
161-0393	**Precision Plus Protein All Blue Standards Value Pack**, 10–250 kD, 5 x 500 µl, 250 applications
161-0394	**Precision Plus Protein Dual Color Standards Value Pack**, 10–250 kD, 5 x 500 µl, 250 applications
161-0395	**Precision Plus Protein™ Kaleidoscope™ Standards Value Pack**, 10–250 kD, 5 x 500 µl, 250 applications
161-0397	**Precision Plus Protein Dual Xtra Value Pack**, 2–250 kD, 5 x 500 µl, 250 applications
161-0398	**Precision Plus Protein™ WesternC™ Pack**, 10–250 kD, 5 x 250 µl WesternC standard, 5 x 250 µl HRP conjugate, 250 applications
161-0378	**Precision Plus Protein Standard Plugs**, unstained, 10–250 kD, 24 applications
Buffers	
161-0747	**4x Laemmli Sample Buffer**, 10 ml
161-0737	**2x Laemmli Sample Buffer**, 30 ml
161-0732	**10x Tris/Glycine/SDS**, 1 L
161-0734	**10x Tris/Glycine**, 1 L
Power Supplies	
164-5050	**PowerPac Basic Power Supply**
164-5052	**PowerPac HC Power Supply**
164-5056	**PowerPac HV Power Supply**
164-5070	**PowerPac Universal Power Supply**
Imaging Systems	
170-8270	**Gel Doc™ EZ Imaging System with Image Lab Software and Stain-Free tray**
170-8195	**Gel Doc XR+ System with Image Lab Software**
170-8265	**ChemiDoc™ XRS+ System with Image Lab Software**
170-8280	**ChemiDoc MP System with Image Lab Software**

Bio-Rad Laboratories, Inc.

Life Science Group

Web site *www.bio-rad.com* ***USA*** *800 424 6723* ***Australia*** *61 2 9914 2800* ***Austria*** *01 877 89 01* ***Belgium*** *09 385 55 11* ***Brazil*** *55 11 5044 5699*
Canada *905 364 3435* ***China*** *86 21 6169 8500* ***Czech Republic*** *420 241 430 532* ***Denmark*** *44 52 10 00* ***Finland*** *09 804 22 00*
France *01 47 95 69 65* ***Germany*** *089 31 884 0* ***Greece*** *30 210 9532 220* ***Hong Kong*** *852 2789 3300* ***Hungary*** *36 1 459 6100* ***India*** *91 124 4029300*
Israel *03 963 6050* ***Italy*** *39 02 216091* ***Japan*** *03 6361 7000* ***Korea*** *82 2 3473 4460* ***Mexico*** *52 555 488 7670* ***The Netherlands*** *0318 540666*
New Zealand *64 9 415 2280* ***Norway*** *23 38 41 30* ***Poland*** *48 22 331 99 99* ***Portugal*** *351 21 472 7700* ***Russia*** *7 495 721 14 04*
Singapore *65 6415 3188* ***South Africa*** *27 861 246 723* ***Spain*** *34 91 590 5200* ***Sweden*** *08 555 12700* ***Switzerland*** *026 674 55 05*
Taiwan *886 2 2578 7189* ***Thailand*** *800 88 22 88* ***United Kingdom*** *020 8328 2000*

Bulletin 6455 Rev A US/EG *13-1337 1013 Sig 1212*