

Table 2.1. Vertical electrophoresis system selection guide.

	Mini-PROTEAN System	Criterion System	PROTEAN II System	PROTEAN Plus System
Advantages	Run 1-4 precast gels in the Mini-PROTEAN Tetra Cell and up to 12 gels in the Mini-PROTEAN Dodeca Cell in mini format. Wing clamp assembly allows faster setup and leak-free operation.	Fast setup with drop-in gel and cell design (precast or handcast). Run 1-2 precast Criterion or handcast gels in the Criterion Cell and up to 12 gels in the Criterion Dodeca Cell. Integrated upper buffer chamber allows leak-free operation.	Large-format gel system offers greater resolution over smaller formats. Can accommodate up to 4 gels and is available in xi or XL formats for running a variety of gel sizes. Multi-cell is available for running up to 6 gels.	Offers maximum resolution in a single gel and the longest range of separation (with the ability to run up to 12 gels). Specifically for the second dimension of 2-D electrophoresis.
Compatible Gel Formats	<ul style="list-style-type: none"> Mini-PROTEAN Precast Gels Ready Gel® Precast Gels Ready Gel Empty Cassettes Mini-PROTEAN Casting Plates 	<ul style="list-style-type: none"> Criterion Precast Gels Criterion Empty Cassettes 	<ul style="list-style-type: none"> PROTEAN I Casting Plates 	<ul style="list-style-type: none"> PROTEAN Plus Casting Equipment
Electrophoresis Cells	<ul style="list-style-type: none"> Mini-PROTEAN Tetra Mini-PROTEAN 3 Dodeca 	<ul style="list-style-type: none"> Criterion Criterion Dodeca 	<ul style="list-style-type: none"> PROTEAN I xi/XL PROTEAN I xi/XL Multi-Cells 	<ul style="list-style-type: none"> PROTEAN Plus Dodeca
Precast Gel Dimensions W x L x thickness	<ul style="list-style-type: none"> Mini-PROTEAN Precast Gels: 8.6 x 6.7 x 0.1 cm Ready Gel Precast Gels: 8.3 x 6.4 x 0.1 cm 	<ul style="list-style-type: none"> Criterion Precast Gels: 10.3 x 8.7 x 0.1 cm 		
Cassette Dimensions (for Handcasting Gels) 10.0 x 8.0 cm		15.0 x 10.6 cm	20.0 x 18.3 cm	18.5 x 20.5 cm 20.0 x 20.5 cm 20.0 x 20.5 cm
Compatible Transfer Systems Well/tank transfer	<ul style="list-style-type: none"> Mini Trans-Blot® Cell Criterion Blotter Trans-Blot® Cell 	<ul style="list-style-type: none"> Criterion Wire Blotter Criterion Plate Blotter Trans-Blot Cell Trans-Blot Plus Cell Trans-Blot Turbo System Trans-Blot SD Cell 	<ul style="list-style-type: none"> Trans-Blot Cell Trans-Blot Plus Cell 	<ul style="list-style-type: none"> Trans-Blot Plus Cell
Semi-dry transfer	<ul style="list-style-type: none"> Trans-Blot® Turbo™ System Trans-Blot SD Cell 			

Power Supplies for PAGE Applications

Power supplies are available to meet the power requirements of numerous applications. The choice of power supply for PAGE applications usually depends on the size and number of gels being run. Table 2.2 compares the Bio-Rad PowerPac Power Supplies recommended for vertical electrophoresis applications.

Table 2.2. PowerPac™ Power Supplies selection guide.

Technique and Recommended Apparatus	PowerPac Power Supply
Laemmli (SDS), O'Farrell, and Second Dimension (SDS) Mini-PROTEAN Tetra Cell	Basic or HC
Criterion Cell	Basic or HC
PROTEAN I xi Cell	HV or Universal
PROTEAN I XL Cell	HV or Universal
High-Throughput Electrophoresis	
Mini-PROTEAN 3 Dodeca Cell	HC or Universal
Criterion Dodeca Cell	HC or Universal
PROTEAN I xi/XL Multi-Cell	Universal
PROTEAN Plus Dodeca Cell	HC or Universal
Western Blotting	
Mini Trans-Blot Cell	HC
Criterion Blotter	HC
Wire electrodes	HC
Trans-Blot Cell	HC
Wire electrodes	HC
Plate electrodes	HC
High-intensity transfer	HC
Trans-Blot Plus Cell	HC
Trans-Blot SD Cell	HC
Protein	HC
DNA/RNA	HC

- Use the PowerPac Basic or PowerPac HC High-Current Power Supply for mini-format vertical PAGE applications
- Use the PowerPac HV High-Voltage or PowerPac Universal Power Supply for large-format vertical PAGE applications
- Use the PowerPac HC Power Supply for applications that require high currents, such as PAGE with the high-throughput Dodeca Cells

Related Literature

PowerPac Basic 300 V Power Supply Flier, bulletin 2881

PowerPac HC High-Current Power Supply Flier, bulletin 2882

PowerPac Universal Power Supply Brochure, bulletin 2885

PowerPac HV Power Supply Brochure, bulletin 3169



Fig. 2.6. PowerPac Power Supplies.

Preparative Electrophoresis

Preparative electrophoresis techniques separate large amounts of protein (nanogram to gram quantities) for the purposes of purification or fractionation (to reduce sample complexity). The same principles that are applied for analytical work can be applied for preparative work.

PAGE

Preparative PAGE can be accomplished using a standard slab gel or special instrumentation. With the slab gel, a single preparative or "prep" well is cast, which allows a large volume of a single sample to be applied within one well. With this approach, the

separated protein is retained within the gel for further analysis or purification (for example, by electroelution).

Alternatively, continuous-elution gel electrophoresis using the Model 491 Prep Cell or Mini Prep Cell yields high-resolution separations and proteins in liquid fractions, ready for downstream use.

Combination Approaches (2-D Separations)

Preparative IEF and PAGE can be combined (or separation on multiple dimensions) for even greater separation.

Links

Preparative Electrophoresis

Power Supplies

PowerPac Universal Power Supply

PowerPac HC High-Current Power Supply

PowerPac HV High-Voltage Power Supply

PowerPac Basic Power Supply

Model 491 Prep Cell and Mini Prep Cell



Ordering Information

Catalog #	Description	Catalog #	Description	Catalog #	Description	Catalog #	Description
1658001	Mini-PROTEAN Tetra Cell , 10-well, 1.0 mm thickness; 4-gel system includes 5 combs, 5 sets of glass plates, 2 casting stands, 4 casting frames, sample loading guide, electrode assembly, companion running module, tank, lid with power cables, mini cell buffer dam	1658033	Mini-PROTEAN Tetra Cell, Mini Trans-Blot Module, and PowerPac Basic Power Supply , includes 165-8001, 170-3935, and 164-5050	165140	PROTEAN Plus Dodeca Cell (100/20 V) and PowerPac HC Power Supply , includes 165150 and 1645062	5000001	Protein Assay Kits and Instruments Bio-Rad Protein Assay Kit I , includes 450 ml dye reagent concentrate, bovine β -globulin standard; sufficient for 440 standard assays or 2,200 microplate assays
1658002	Mini-PROTEAN Tetra Cell , 10-well, 0.75 mm thickness; 2-gel system includes 5 combs, 5 sets of glass plates, 2 casting stands, 4 casting frames, sample loading guide, electrode assembly, tank, lid with power cables, mini cell buffer dam	1658034	Mini-PROTEAN Tetra Cell for Mini Precast Gels, Mini Trans-Blot Module, and PowerPac Basic Power Supply , includes 1658004, 1703935, and 1645052	165141	PROTEAN Plus Dodeca Cell (220/240 V) and PowerPac HC Power Supply , includes 165151 and 1645052	5000002	Bio-Rad Protein Assay Kit II , includes 450 ml dye reagent concentrate, bovine serum albumin standard; sufficient for 440 standard assays or 2,200 microplate assays
1658003	Mini-PROTEAN Tetra Cell , 10-well, 1.0 mm thickness; 2-gel system includes 5 combs, 5 sets of glass plates, casting stand, 2 casting frames, sample loading guide, electrode assembly, tank, lid with power cables, mini cell buffer dam	1658035	Mini-PROTEAN Tetra Cell, Mini Trans-Blot Module, and PowerPac HC Power Supply , includes 1658001, 1703935, and 1645052	165142	PROTEAN Plus Dodeca Cell (100/720 V) and PowerPac Universal Power Supply , includes 165150 and 1645070	5000111	DC™ Protein Assay Kit I , includes 250 ml alkaline copper tartrate solution, 2 L dilute Folin reagent, 5 ml surfactant solution, bovine β -globulin standard; sufficient for 450 standard assays
1658004	Mini-PROTEAN Tetra Cell for Mini Precast Gels , 4-gel system includes electrode assembly, clamping frame, companion module, tank, lid with power cables, mini cell buffer dam	1658036	Mini-PROTEAN Tetra Cell for Mini Precast Gels, Mini Trans-Blot Module, and PowerPac HC Power Supply , includes 1658004, 1703935, and 1645052	165144	PROTEAN Plus Dodeca Cell (100/720 V) Trans-Blot Plus Cell, and PowerPac Universal Power Supply , includes 165150, 1703930, and 1645070	5000112	DC Protein Assay Kit II , includes 250 ml alkaline copper tartrate solution, 2 L dilute Folin reagent, 5 ml surfactant solution, bovine serum albumin standard; sufficient for 450 standard assays
1658005	Mini-PROTEAN Tetra Cell for Mini Precast Gels , 2-gel system includes electrode assembly, clamping frame, tank, lid with power cables, mini cell buffer dam	1658037	Mini-PROTEAN 3 Dodeca Cell, lid with power cables, 6 electrophoresis clamping frames, 2 buffer dams, drain line, 2 gel releasers	165145	PROTEAN Plus Dodeca Cell (220/240 V) and PowerPac Universal Power Supply , includes 165151 and 1645070	5000120	RC DC™ Protein Assay Reagents Package , includes 250 ml alkaline copper tartrate solution, 2 L dilute Folin reagent, 5 ml surfactant solution; sufficient for 450 standard assays
1658006	Mini-PROTEAN Tetra Cell , 10-well, 1.5 mm thickness; 4-gel system includes 5 combs, 5 sets of glass plates, 2 casting stands, casting frames, sample loading guide, electrode assembly, tank, lid with power cables, mini cell buffer dam	1658038	Mini-PROTEAN 3 Dodeca Cell with Multi-Casting Chamber , same as 165-4100 with built-in casting chamber, 15 separation sheats, 8 acrylic blocks, tapered tier connector, stopcock valve	165146	PROTEAN Plus Dodeca Cell (220/240 V) and PowerPac HC Power Supply , includes 165151 and 1645052	5000121	RC DC™ Protein Assay Kit I , includes RC reagents package, DC reagents package, bovine β -globulin standard; sufficient for 450 standard assays
1658007	Mini-PROTEAN Tetra Cell , 10-well, 1.5 mm thickness; 2-gel system includes 5 combs, 5 sets of glass plates, casting stand, 2 casting frames, sample loading guide, electrode assembly, tank, lid with power cables, mini cell buffer dam	1658039	Criterion™ Cells and Systems Criterion Cell, includes buffer tank, lid with power cables, 3 sample loading guides (2 + 2-well, 15-well, 26-well)	165147	PROTEAN Plus Dodeca Cell (220/240 V) and PowerPac Universal Power Supply , includes 165151 and 1645070	5000122	RC DC Protein Assay Kit II , includes RC reagents package, DC reagents package, bovine serum albumin standard; sufficient for 450 standard assays
1658025	Mini-PROTEAN Tetra Cell and PowerPac™ Basic Power Supply , includes 1589001 and 1645050	1658040	Criterion Cell and PowerPac Basic Power Supply , 100–120/220–240 V, includes 1650001 and 1645050	165148	PROTEAN Plus Dodeca Cell (220/240 V) and PowerPac Universal Power Supply , includes 165151 and 1645070	5000201	Quick Start™ Bradford Protein Assay Kit I , includes x dye reagent (1 L), bovine serum albumin standard; sufficient for 200 standard assays or 4,000 microplate assays
1658026	Mini-PROTEAN Tetra Cell and PowerPac™ HV Power Supply , includes 1589001 and 1645050	1658041	Criterion Dodeca Cell and PowerPac HC Power Supply , includes 1654130 and 1645052	165149	PROTEAN Plus Dodeca Cell (220/240 V) and PowerPac Universal Power Supply , includes 165151 and 1645070	5000202	Quick Start Bradford Protein Assay Kit II , includes x dye reagent (1 L), bovine serum albumin standard set (2 sets of 7 concentration standards, 0.125–2.0 mg/ml, 2 ml)
1658027	Mini-PROTEAN Tetra Cell and PowerPac™ HC Power Supply , includes 1589001 and 1645052	1658042	Criterion Dodeca Cell and PowerPac Universal Power Supply , includes 1654130 and 1645052	165150	PROTEAN Plus Dodeca Cell (220/240 V) and PowerPac Universal Power Supply , includes 165151 and 1645070	5000203	Quick Start Bradford Protein Assay Kit III , includes x dye reagent (1 L), bovine β -globulin standard set (2 sets of 7 concentration standards, 0.125–2.0 mg/ml, 2 ml)
1658028	Mini-PROTEAN Tetra Cell and PowerPac™ HV Power Supply , includes 1589001 and 1645050	1658043	Criterion Dodeca Cell and 6-Row AnyGel™ Stand , includes 1654130 and 165191	165151	PROTEAN Plus Dodeca Cell (220/240 V) and PowerPac Universal Power Supply , includes 165151 and 1645070	5000204	Quick Start Bradford Protein Assay Kit 4 , includes x dye reagent (1 L), bovine β -globulin standard set (2 sets of 7 concentration standards, 0.125–2.0 mg/ml, 2 ml)
1658029	Mini-PROTEAN Tetra Cell and Mini Trans-Blot™ Module , includes 1658001 and 1703935	1658044	PROTEAN™ II x1 Cells PROTEAN II x1 Cell, 16 cm, without spacers and combs PROTEAN II x1 Cell, 16 cm, 1.5 mm spacers (4), 15-well combs (2) PROTEAN II x1 Cell, 16 cm, 1.0 mm spacers (4), 15-well combs (2) PROTEAN II x1 Cell, 16 cm, 0.75 mm spacers (4), 15-well combs (2) PROTEAN II x1 Cell, 20 cm, without spacers and combs PROTEAN II x1 Cell, 20 cm, 1.5 mm spacers (4), 15-well combs (2) PROTEAN II x1 Cell, 20 cm, 1.0 mm spacers (4), 15-well combs (2) PROTEAN II x1 Cell, 20 cm, 0.75 mm spacers (4), 15-well combs (2)	165152	PROTEAN Plus Dodeca Cell (220/240 V) and PowerPac Universal Power Supply , includes 165151 and 1645070	1702502	Standard Cuvettes , 1–3.5 ml, quartz disposable DNase- and RNase-free cuvettes
1658030	Mini-PROTEAN Tetra Cell for Mini Precast Gels and Mini Trans-Blot Module , includes 1658004 and 1703935	1658045	Criterion Dodeca Cell and PowerPac HC Power Supply , includes 1654130 and 1645052	165153	PROTEAN Plus Dodeca Cell (220/240 V) and PowerPac Universal Power Supply , includes 165151 and 1645070	1702511	UVView™ Cuvettes , pack of 100, individually packaged, desorbable DNase- and RNase-free cuvettes
						160747	Sample Preparation Buffers and Reagents 4x Laemmli Sample Buffer, 10 ml Native Sample Buffer, 30 ml Tricine Sample Buffer, 30 ml IEF Sample Buffer, 30 ml
						160791	Glycine , 1 kg
						160792	SDS Solution , 10% (w/v), 250 ml
						160793	10% Tween 20 , 5 ml
						160794	2-Mercaptoethanol , 25 ml
						160795	Dithiothreitol , 5 g
						160796	Bromophenol Blue , 10 g
						160797	Urea , 250 g

Catalog #	Description	Catalog #	Description
Protein Standards		Running Buffers and Reagents	
Recombinant Prestained Protein Standards		10x Tris/Glycine/SDS, 1 L	1610732
1610393	Precision Plus Protein All Blue Standards Value Pack, 5 x 500 µl	10x Tris/Glycine, 1 L	1610734
1610373	Precision Plus Protein All Blue Standards, 500 µl	10x Tris/Tricine/SDS, 1 L	1610744
1610394	Precision Plus Protein Dial Color Standards Value Pack, 5 x 500 µl	10x MOPS Running Buffer, 20x, 500 ml	1610788
1610374	Precision Plus Protein Dial Color Standards, 500 µl	10x MES Running Buffer, 20x, 500 ml	1610790
1610397	Precision Plus Protein Dial Xtra Standards Value Pack, 5 x 500 µl	10x Tricine Running Buffer, 20x, 500 ml	1610793
1610377	Precision Plus Protein Dial Xtra Standards, 500 µl	10x Tris/Tricine/SDS, 1 L	1610796
1610395	Precision Plus Protein Kaleidoscope Standards Value Pack, 5 x 500 µl	10x MOPS Running Buffer, 20x, 500 ml	1610797
1610375	Precision Plus Protein Kaleidoscope Standards, 500 µl	10x Tricine Running Buffer, 20x, 500 ml	1610761
1610399	Precision Plus Protein WesternC Standards Value Pack, 5 x 250 µl	10x IEF Anode Buffer, 250 ml	1610762
1610376	Precision Plus Protein WesternC Standards, 250 µl	Zymogram Renaturation Buffer, 125 ml	1610765
1610398	Precision Plus Protein WesternC (Standards + HRP) Value Pack, 5 x 250 µl	Zymogram Development Buffer, 125 ml	1610729
1610395	Precision Plus Protein WesternC (Standards + HRP) Value Pack, 250 µl	EDTA, 500 g	1610718
Recombinant Unstained Protein Standards		Glycine, 1 kg	1610713
1610396	Precision Plus Protein Unstained Standards Value Pack, 5 x 1000 µl	Tricine, 500 g	1610719
1610363	Precision Plus Protein Unstained Standards, 1000 µl	Tris, 1 kg	1610710
		Gel Casting Buffers and Reagents	
		SDS-PAGE Reagent Starter Kit, includes 100 g acrylamide, 5 g bis, 5 ml TEMED,	1615100
		10 g ammonium persulfate	1610100
		Acrylamide, 99.9%, 100 g	1610120
		Acrylamide/Bis Powder, 19:1, 30 g	1610122
		Acrylamide/Bis Powder, 37.5:1, 30 g	1610140
		40% Acrylamide Solution, 500 ml	1610144
		40% Acrylamide/Bis Solution, 19:1, 500 ml	1610146
		40% Acrylamide/Bis Solution, 39:1, 500 ml	1610148
		40% Acrylamide/Bis Solution, 37.5:1, 500 ml	1610154
		30% Acrylamide/Bis Solution, 19:1, 500 ml	1610156
		30% Acrylamide/Bis Solution, 39:1, 500 ml	1610158
		30% Acrylamide/Bis Solution, 37.5:1, 500 ml	1610200
		Bis Crosslinker, 5 g	1610800
		TEMED, 5 ml	1610798
		Resolving Gel Buffer, 1.5 M Tris-HCl, pH 8.8, 1 L	1610700
		Ammonium Persulfate (APS), 10 g	1610799
		Stacking Gel Buffer, 0.5 M Tris-HCl, pH 6.8, 1 L	

10-Gels/Box	10-Well 30 µl	10-Well 50 µl	15-Well 15 µl	7cm PG Strip	12-Well
Mini-PROTEAN® TGX™ Resolving Gels					
7.5%	4561024	4561024	4561026	4561021	4561025
10%	4561033	4561034	4561036	4561031	4561035
12%	4561043	4561044	4561046	4561041	4561045
18%	4561073	4561074	4561076	4561071	4561075
4-15%	4561083	4561084	4561086	4561081	4561085
4-20%	4561093	4561094	4561096	4561091	4561095
8-16%	4561103	4561104	4561106	4561101	4561105
10-20%	4561113	4561114	4561116	4561111	4561115
Any KD	4569033	4569034	4569036	4569031	4569035
Mini-PROTEAN® TGX Stain-Free™ Gels					
7.5%	4568023	4568024	4568026	4568021	4568025
10%	4568033	4568034	4568036	4568031	4568035
12%	4568043	4568044	4568046	4568041	4568045
4-15%	4568083	4568084	4568086	4568081	4568085
4-20%	4568093	4568094	4568096	4568091	4568095
8-16%	4568103	4568104	4568106	4568101	4568105
Any KD	4568123	4568124	4568126	4568121	4568125
Mini-PROTEAN Tris-Tricine Gels (Pack of 2)					
16.5% Resolving Gel	4563063	4563064	4563066	—	4563065*
10-20% Resolving Gel	4563113	4563114	4563116*	—	4563115*
9% TBE Gel	4565013	4565014*	4565016	—	4565015*
Mini-PROTEAN TBE-Urea Gels (Pack of 2)					
10% TBE-Urea Gel	4566033*	—	4566036*	—	—
15% TBE-Urea Gel	4566053*	—	4566056*	—	4566055*

All formats are available as both ten packs (catalog numbers listed) and two packs. To order as a two pack, add an "S" to the end of the catalog number for the corresponding ten pack.



Description	12-2-Well** 45 µl	18-Well 30 µl	26-Well* 15 µl	Prep+2-Well** 800 µl	IPG+1-Well** 11 cm IPG Strip
Criterion™ TOX™ gels**					
7.5%	5671023	5671024	5671025	—	—
10%	5671033	5671034	5671035	—	—
12%	5671043	5671044	5671045	—	—
4-15%	5671053	5671054	5671055	5671052	5671051
4-20%	5671063	5671064	5671065	5671102	5671101
8-16%	5671073	5671074	5671075	5671122	5671121
Any KD	5671123	5671124	5671125	—	—
Criterion™ TGX Stain-Free™ Gels**					
7.5%	5678023	5678024	5678025	—	—
12%	5678043	5678044	5678045	—	—
18%	5678073	5678074	5678075	5678072	5678071
4-15%	5678083	5678084	5678085	5678082	5678081
4-20%	5678093	5678094	5678095	5678092	5678091
8-16%	5678103	5678104	5678105	5678102	5678101
Any KD	5678123	5678124	5678125	5678122	5678121
Criterion XT Bis-Tris Gels**					
10% Resolving Gel	3450111	3450112	3450113	—	3450115
12% Resolving Gel	3450117	3450118	3450119	3450120†	3450121
4-12% Resolving Gel	3450123	3450124	3450125	3450126†	3450127
Criterion XT Tris-Acetate Gels					
3-6% Resolving Gel	3450129	3450130	3450131	—	—
Criterion Tris-HCl Gels					
10% Resolving Gel	3450009	3450010	3450011	—	3450101
12.5% Resolving Gel	3450014	3450015	3450016	—	3450102
15% Resolving Gel	3450019	3450020	3450021	—	—
4-15% Linear Gradient	3450027	3450028	3450029	—	3450103
4-20% Linear Gradient	3450032	3450033	3450034	—	3450104
10-20% Linear Gradient	3450042	3450043	3450044	—	3450107
Criterion Tris-Tricine 16.5% Tris-Tricine	3450063	3450064	3450065†	—	—
Criterion IEF Gels					
pH3-10	3450071†	3450072†	3450073†	—	—
pH5-8	—	3450076†	—	—	—

* Multichannel pipet compatible.
 ** Includes reference wells.
 *** Purchase of this product is accompanied by a limited license under U.S. Patent Numbers 6,143,154; 6,096,182; 6,059,948; 5,578,180; 5,922,185; 6,162,338; and 6,783,651 and corresponding foreign patents.
 † Please allow up to 2 weeks for delivery.

Catalog #	Description	Catalog #	Description
Ge Casting Accessories	See catalog or bio-rad.com for a complete listing of accessories, including available empty gel cassettes and glass plates, spacers, combs, etc.	Imaging Systems	
1655131	AnyGel Stand, 6-row, holds 6 PROTEAN® Gels or 12 Criterion Gels	12003153	ChemIDoc™ Imaging System , gel and blot imaging and analysis system, includes internal computer, 12" touch-screen display, camera, Image Lab™ Touch Software, Image Lab Software, Bio/UV/Stain-Free Sample Tray, Optional upgrade path to ChemIDoc MP for fluorescence detection
1654131	AnyGel Stand, single-row, holds 1 PROTEAN Gel or 2 Criterion Gels	12003154	ChemIDoc MP Imaging System , gel and blot imaging and analysis system, includes internal computer, 12" touch-screen display, camera, Image Lab Touch Software, Image Lab Software, Bio/UV/Stain-Free Sample Tray
Total Protein Gel Stains		1707991	GS-900™ Calibrated Densitometry System , gel densitometry system, PC compatible, includes scanner, cables, Image Lab Software, optional 21 CFR Part 11 and Installation Qualification/Operators Qualification
1615803	CC Colloidal Coomassie Solution Kit , 1 L, ready-to-use, non-hazardous colloidal Coomassie G-250 Stain for protein polyacrylamide gels	1708195	Gel Doc™ XR+ System with Image Lab Software , ep-i-white illumination, camera, cables, Image Lab Software
1617786	Bio-Safe™ Coomassie Stain , 1 L	1708270	Gel Doc EZ System with Image Lab Software , PC or Mac, includes darkroom, 9 cables, Image Lab software, samples trays (#1708271, 1708272, 1708273, or 1708274) are sold separately; sample trays are required to use the system
1617877	Bio-Safe Coomassie Stain , 5 L	1708265	ChemIDoc™ XRS- System with Image Lab Software , PC or Mac, includes darkroom, UV transilluminator, ep-i-white illumination, camera, power supply, cables, Image Lab Software
1610435	Coomassie Brilliant Blue R-250 Staining Solutions Kit , includes 1 L Coomassie Brilliant Blue R-250 Staining Solution, 2 x 1 L Coomassie Brilliant Blue R-250 Destaining Solution	1708400	Personal Molecular Imager™ (PMI) System , PC or Mac, 110/240 V, includes sample tray set and USB2 cable
1610436	Coomassie Brilliant Blue R-250 Staining Solution , 1 L	Analysis Software	
1610438	Coomassie Brilliant Blue R-250 Destaining Solution , 1 L	1709690	Image Lab Software
1610400	Coomassie Brilliant Blue G-250 , 10 g		
1610406	Coomassie Brilliant Blue G-250 , 10 g		
1610443	Silver Stain Kit , includes oxidizer concentrate, silver reagent concentrate, silver stain developer, stains 20 full size or 48 mini gels		
1610449	Silver Stain Plus™ Kit , includes fixative emulsifier concentrate, silver complex solution, reduction moderator solution, image development reagent, development accelerator reagent, stains 19 full size or 40 mini gels		
1610486	Orion™ Fluorescent Gel Stain , 1x solution, 1 L		
1610482	Flamingo™ Fluorescent Gel Stain , 10x solution, 500 ml		
1703125	SYPRO Ruby Protein Gel Stain , 1x solution, 1 L		
1610440	Zinc Stain and Destain Kit , includes 125 ml of 10x zinc stain solution A, 125 ml of 10x zinc stain solution B, 125 ml of 10x zinc destain solution		
1610470	Copper Stain and Destain Kit , includes 125 ml of 10x copper stain, 125 ml of 10x copper destain solution		
High-Throughput Stainers			
1633400	Dodeca™ Stainer, large , 100-240 V, includes 13 trays (12 clear, 1 white), 12 tray attachments, shaking rack, shaker tank, lid with shaker motor, shaker control unit, gel clip		
1633401	Dodeca Stainer, small , 100-240 V, includes 13 trays (12 clear, 1 white), 12 Criterion tray attachments, shaking rack, solution tank, lid with shaker motor, shaker control unit, gel clip		

