

Bolt Bis-Tris Plus mini gels

Neutral-pH gel system with a unique wedge well design

Bolt Bis-Tris Plus gels are precast polyacrylamide gels designed for optimal separation of a broad molecular weight range of proteins under denaturing conditions during gel electrophoresis (Figures 6 and 7). These gels help deliver consistent performance with a neutral-pH environment to minimize protein degradation. The unique wedge well design (Figure 5) allows loading of up to 2x more sample volume than other precast gels. Bolt gels are ideal for western blot transfer and analysis along with any other technique where protein integrity is crucial.

Bolt Bis-Tris Plus gels offer:

- **High sample volume capacity**—wedge well design allows detection of proteins in very dilute samples or measurement of low-abundance proteins
- **Preserved protein integrity**—neutral-pH formulation minimizes protein modifications
- **Superior band quality and band volume**—Bolt Bis-Tris Plus gel chemistry is designed to deliver sharp, straight bands with higher band volume
- **Better protein resolution**—gels are 10% longer, allowing detection of more protein bands than standard mini gels
- **High lot-to-lot consistency**—coefficient of variation (CV) of only 2% for R_f values (migration)



Figure 5. The unique wedge well design of Bolt Bis-Tris Plus gels.



Specifications

- Shelf life: ~16 months
- Average run time: 35 minutes
- Separation range: 0.3–260 kDa
- Polyacrylamide concentrations: fixed 8%, 10%, and 12%; gradient 4–12%
- Gel dimensions: 8 x 8 cm (1 mm thick)
- Maximum sample volume per 12-well gel: ~40 μ L, or two-thirds of the sample well volume

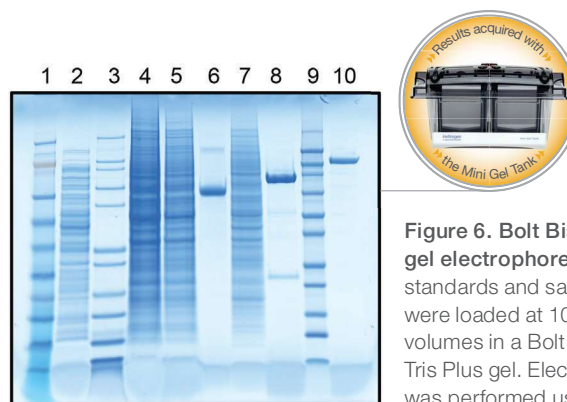


Figure 6. Bolt Bis-Tris Plus gel electrophoresis. Protein standards and samples were loaded at 10 μ L sample volumes in a Bolt 4–12% Bis-Tris Plus gel. Electrophoresis was performed using the Mini Gel Tank at 200 V (constant).

Sharp, straight bands with consistent migration patterns were observed after staining with Invitrogen™ SimplyBlue™ SafeStain. Images were acquired using a flatbed scanner. **Lane 1:** Invitrogen™ SeeBlue™ Plus2 Prestained Standard; **Lane 2:** 10 μ g *E. coli* lysate; **Lane 3:** Invitrogen™ Mark12™ Unstained Standard (blend of 12 purified proteins); **Lane 4:** 40 μ g HeLa cell lysate; **Lane 5:** 20 μ g HeLa cell lysate; **Lane 6:** 5 μ g BSA; **Lane 7:** 40 μ g Jurkat cell lysate; **Lane 8:** 5 μ g GST fusion protein; **Lane 9:** Invitrogen™ Sharp Unstained Protein Standard; **Lane 10:** 5 μ g β -galactosidase.

►► Learn more at thermofisher.com/bolt

Broad molecular weight protein separation

Bis-Tris chemistry: optimized protein separation for high-sensitivity applications

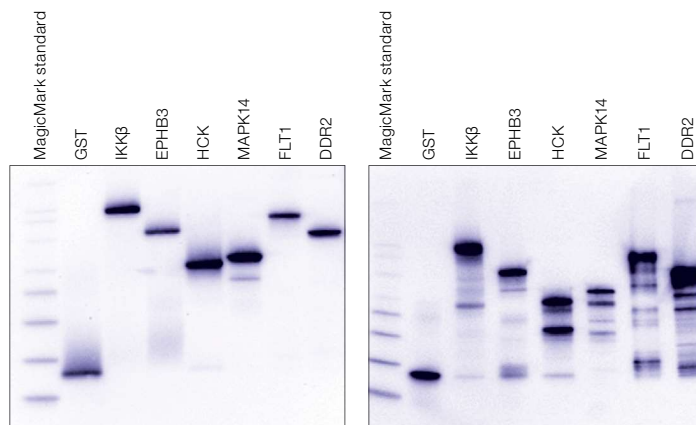
The Bis-Tris gel chemistry provides a neutral-pH environment that minimizes protein degradation. Additionally, preserving protein integrity becomes particularly important when separating low-abundance proteins. Bis-Tris chemistry gels are offered as Bolt Bis-Tris Plus mini gels and NuPAGE Bis-Tris mini gels. Bolt Bis-Tris Plus mini gels are designed for optimal separation of a broad molecular weight range of proteins under denaturing conditions during gel electrophoresis. The unique WedgeWell™ design allows loading of up to 2x more sample volume than other precast gels. Bolt gels are ideal for western blot analysis and applications where protein integrity is crucial and higher sensitivity is required.



Wedge-shaped well design of Bolt Bis-Tris Plus mini gels.

Benefits you can expect from Bolt Bis-Tris Plus gels include:

- **Preserved protein integrity**—neutral-pH formulation minimizes protein modifications or degradation that can result in poor band resolution
- **High sample-volume capacity**—WedgeWell design allows detection of proteins in very dilute samples or visualization of low-abundance proteins
- **Superior band quality and band volume**—Bolt Bis-Tris Plus gel chemistry is designed to deliver sharp, straight bands with higher band volume
- **Better protein resolution**—gels are 10% longer, allowing detection of more protein bands than standard mini gels
- **High lot-to-lot consistency**—coefficient of variation (CV) of only 2% for R_f values (migration)
- **Optimized run conditions**—separate your proteins using constant voltage in approximately 35 minutes



Bolt Bis-Tris Plus gel

Bio-Rad TGX gel

Bolt Bis-Tris Plus mini gels help provide better western blotting results. A western blot of a Bolt gel shows clean, sharp protein signals corresponding to only full-length proteins, whereas a western blot of a Bio-Rad™ TGX™ gel shows multiple low molecular weight degradation products. Protein kinases implicated in cancer (IKKβ, EPHB3, HCK, MAPK14, FLT1, and DDR2) were analyzed on a Bolt Bis-Tris Plus gel and a Bio-Rad TGX Tris-Glycine gel. The purified kinases (50 ng each), along with Invitrogen™ MagicMark™ XP Western Protein Standard and purified recombinant GST protein, were loaded on a 10-well, 4–12% Bolt gel and a 10-well, 4–20% Bio-Rad TGX gel. The samples were separated and transferred to 0.45 μm PVDF membranes using the respective manufacturers' protocols. Immunodetection was performed using an anti-GST antibody and Invitrogen™ WesternBreeze™ chemiluminescence detection. The blots were imaged using an LAS-1000 system (FujiFilm).

Learn more at thermofisher.com/bolt

Bolt Bis-Tris Plus gels

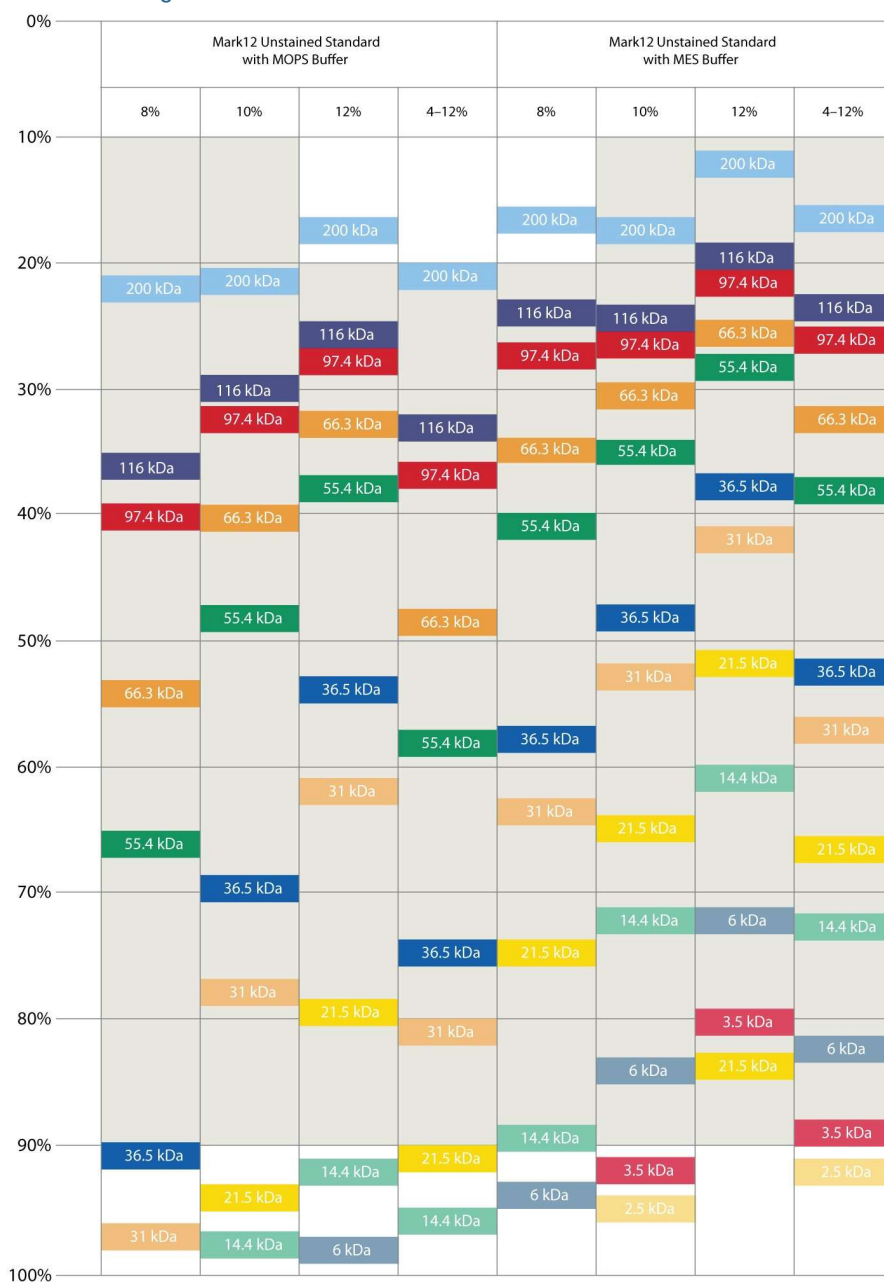


Figure 7. Bolt Bis-Tris Plus gel migration chart. Optimal separation range is shown within the gray areas.

“The new Bolt™ system is wonderful. I am still amazed that I can run a PAGE gel in 23 minutes. The entire system is incredibly user friendly from the Bolt™ precast gels with wedged wells for ease of loading to the Mini Gel Tank system. The bands produced from the westerns were sharp and straight. I would have highly recommended this system to anyone doing protein work.”
—Crystal M., Queen's University, Ontario, Canada

“For one of our projects in the lab, we resolve proteins by electrophoresis to determine the accumulation of ubiquitinated proteins following treatment with a proteasome inhibitor. When we resolved the ubiquitinated proteins using the Tris-glycine gels, we observed a smear. However, when we switched to resolving the ubiquitinated proteins using the Bolt Bis-Tris gels, we were delightfully surprised to observe individual protein bands in place of the smear.” —Susan S., University of Pennsylvania, Philadelphia, US



Did you know?

Timothy Updyke and **Sheldon Engelhorn** filed a patent for the neutral-pH Bis-Tris gel system in 1996.

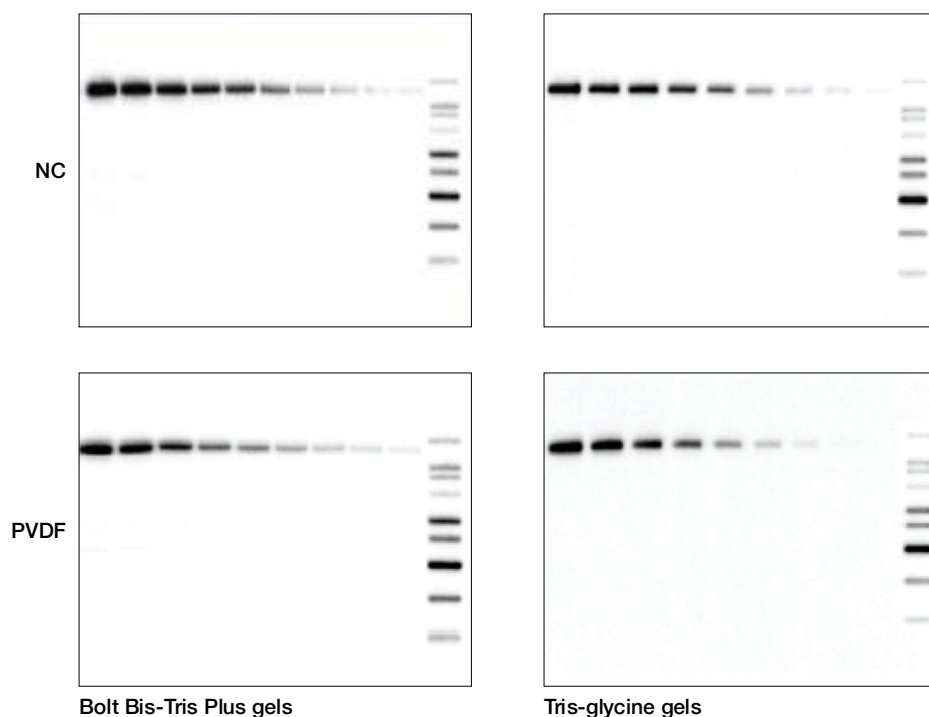
Recommended products

The Invitrogen™ Bolt™ Welcome Pack + iBlot™ 2 System offers a complete protein separation and western blot solution by combining our Mini Gel Tank, Bolt gels and buffers, SeeBlue Plus2 Prestained Standard, and Invitrogen™ iBlot™ 2 Gel Transfer Device with transfer stacks.

Thermo Scientific™ Pierce™ Power Stainer is recommended for fast Coomassie dye staining of Bolt Bis-Tris Plus Gels.

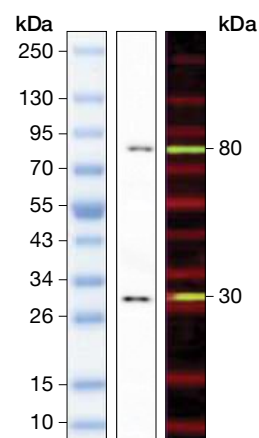


The Bolt Welcome Pack + iBlot 2 System.



Greater sensitivity with Bolt Bis-Tris Plus gels. Total cell extracts from A431 cells were transferred to NC and PVDF membranes from a 4–12% Bolt Bis-Tris Plus gel, and 4–20% Tris-Glycine precast gel using the Invitrogen™ iBlot™ 2 Gel Transfer Device. The cells were treated with 100 ng/mL of human epidermal growth factor (hEGF) to up-regulate expression of the phospho-EGF receptor. The protein loads of the cell extracts ranged from 20 µg to 1.2 µg of extract. The blots were processed on the Invitrogen™ iBind™ Western System with a 1:200 dilution of Phospho-EGF Receptor (Tyr1068) (1H12) Mouse mAb (Cell Signaling Technology) and a 1:2,000 dilution of anti-mouse HRP secondary antibody (Jackson ImmunoResearch). Detection was performed with Invitrogen™ Novex™ ECL HRP Substrate. Detection sensitivity was nearly two-fold greater using blots from Bolt gels compared to blots from Tris-glycine gels.

Specifications	
Gel percentages	8%, 10%, 12%, 4–12%
Gel dimensions	Mini (8 x 8 cm), 1.0 mm thick
Shelf life	16 months at 4–25°C
Separation range	15 kDa to 260 kDa (MOPS buffer), 3.5 kDa to 160 kDa (MES buffer)
Run time	20 min (MES buffer) 35 min (MOPS buffer)
Running buffer	MES SDS Running Buffer or MOPS SDS Running Buffer
Sample buffer	Bolt LDS Sample Buffer with Bolt Sample Reducing Agent
Recommended ladders	iBright Prestained Protein Ladder



Invitrogen™ iBright™ Prestained Protein Ladder. Gel: Novex 4–20% Tris-Glycine Mini Gel, WedgeWell format; **left:** prestained ladder after gel separation; **center:** chemiluminescent substrate on western blot; **right:** near-IR fluorescence on western blot.

Protein gels welcome packs

Protein gels welcome packs contain the components for outstanding protein separation and are available for each of our protein gels. The typical protein gels welcome pack provides all of the necessary gels, buffers, and reagents you need, as well as the Mini Gel Tank.

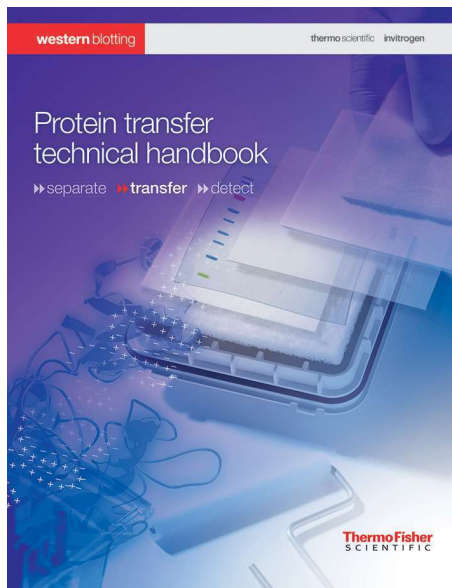
Learn more at thermofisher.com/proteingelwelcome



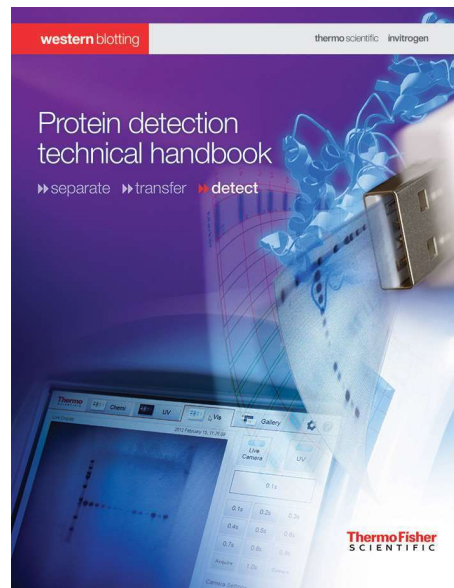
Get useful information for improving your protein separation and western blot results from our protein separation, transfer, and detection technical handbooks. Download your free copies today.



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Ordering information

Product	Unit size	Cat. No.
Handcast polyacrylamide gels		
SureCast Gel Handcast Bundle A	Multiple	HC1000SR
SureCast Gel Handcast Bundle B	Multiple	HC1000S
SureCast Gel Handcast Station	1 casting station	HC1000
SureCast Glass Plates	2 glass plate sets (2 front and 2 back)	HC1001
SureCast Sealing Pads	2 sealing pads	HC1002
SureCast 10-well Multi-Use Tool	1 multi-use tool	HC1010
SureCast 12-well Multi-Use Tool	1 multi-use tool	HC1012
SureCast 15-well Multi-Use Tool	1 multi-use tool	HC1015
SureCast Gel Spacer	10 spacers	HC1003
SureCast Stacking Buffer (1 L), 2-pack	2 x 500 mL dry packs	HC2112
SureCast Stacking Buffer (2.5 L), 5-pack	5 x 500 mL dry packs	HC2115
SureCast Resolving Buffer (1 L), 2-pack	2 x 500 mL dry packs	HC2212
SureCast Resolving Buffer (2.5 L), 5-pack	5 x 500 mL dry packs	HC2215
SureCast APS	25 g	HC2005
SureCast Acrylamide Solution, 40%	450 mL	HC2040
SureCast TEMED	30 mL	HC2006
Select precast gel Bolt Bis-Tris Plus Gels		
Bolt 8% Bis-Tris Plus Gels, 10-well	1 box	NW00080BOX
Bolt 8% Bis-Tris Plus Gels, 12-well	1 box	NW00082BOX
Bolt 8% Bis-Tris Plus Gels, 15-well	1 box	NW00085BOX
Bolt 8% Bis-Tris Plus Gels, 17-well	1 box	NW00087BOX
Bolt 10% Bis-Tris Plus Gels, 10-well	1 box	NW00100BOX
Bolt 10% Bis-Tris Plus Gels, 12-well	1 box	NW00102BOX
Bolt 10% Bis-Tris Plus Gels, 15-well	1 box	NW00105BOX
Bolt 10% Bis-Tris Plus Gels, 17-well	1 box	NW00107BOX
Bolt 12% Bis-Tris Plus Gels, 10-well	1 box	NW00120BOX
Bolt 12% Bis-Tris Plus Gels, 12-well	1 box	NW00122BOX
Bolt 12% Bis-Tris Plus Gels, 15-well	1 box	NW00125BOX
Bolt 12% Bis-Tris Plus Gels, 17-well	1 box	NW00127BOX
Bolt 4–12% Bis-Tris Plus Gels, 10-well	1 box	NW04120BOX
Bolt 4–12% Bis-Tris Plus Gels, 12-well	1 box	NW04122BOX
Bolt 4–12% Bis-Tris Plus Gels, 15-well	1 box	NW04125BOX
Bolt 4–12% Bis-Tris Plus Gels, 17-well	1 box	NW04127BOX
Bolt Empty Mini Gel Cassettes	20 cassettes	NW2010
Bolt Empty Mini Gel Cassette Combs, 10-well	20 combs	NW3010
Bolt Empty Mini Gel Cassette Combs, 12-well	20 combs	NW3012
Bolt Welcome Pack B, 4–12%, 15-well	1 kit**	NW0412B

Product	Unit size	Cat. No.
Bolt Welcome Pack A, 4–12%, 10-well	1 kit**	NW0412A
One box contains 10 gels. ** Bolt Welcome Pack kit includes Mini Gel Tank, 2 boxes of Bolt 4–12% Gels (10-well/15-well), Bolt MES Running Buffer (20X), Bolt LDS Sample Buffer (4X), Bolt Sample Reducing Agent (10X) and SeeBlue [®] Plus2 Prestained Standard		
NuPAGE Bis-Tris Mini Gels (8 cm x 8 cm)		
NuPAGE 10% Bis-Tris Protein Gels, 1.0 mm, 1-well	1 box	NP0304BOX
NuPAGE 10% Bis-Tris Protein Gels, 1.0 mm, 10-well	10 gels	NP0301BOX
NuPAGE 10% Bis-Tris Protein Gels, 1.0 mm, 10-well	2 gels	NP0301PK2
NuPAGE 10% Bis-Tris Protein Gels, 1.0 mm, 12-well	10 gels	NP0302BOX
NuPAGE 10% Bis-Tris Protein Gels, 1.0 mm, 12-well	2 gels	NP0302PK2
NuPAGE 10% Bis-Tris Protein Gels, 1.0 mm, 15-well	1 box	NP0303BOX
NuPAGE 10% Bis-Tris Protein Gels, 1.0 mm, 9-well	1 box	NP0307BOX
NuPAGE 10% Bis-Tris Protein Gels, 1.5 mm, 10-well	1 box	NP0315BOX
NuPAGE 10% Bis-Tris Protein Gels, 1.5 mm, 15-well	1 box	NP0316BOX
NuPAGE 12% Bis-Tris Protein Gels, 1.0 mm, 1-well	1 box	NP0344BOX
NuPAGE 12% Bis-Tris Protein Gels, 1.0 mm, 10-well	10 gels	NP0341BOX
NuPAGE 12% Bis-Tris Protein Gels, 1.0 mm, 10-well	2 gels	NP0341PK2
NuPAGE 12% Bis-Tris Protein Gels, 1.0 mm, 12-well	10 gels	NP0342BOX
NuPAGE 12% Bis-Tris Protein Gels, 1.0 mm, 12-well	2 gels	NP0342PK2
NuPAGE 12% Bis-Tris Protein Gels, 1.0 mm, 15-well	1 box	NP0343BOX
NuPAGE 12% Bis-Tris Protein Gels, 1.0 mm, 17-well	1 box	NP0349BOX
NuPAGE 4–12% Bis-Tris Protein Gels, 1.0 mm, 1-well	1 box	NP0324BOX
NuPAGE 4–12% Bis-Tris Protein Gels, 1.0 mm, 10-well	10 gels	NP0321BOX
NuPAGE 4–12% Bis-Tris Protein Gels, 1.0 mm, 10-well	2 gels	NP0321PK2
NuPAGE 4–12% Bis-Tris Protein Gels, 1.0 mm, 12-well	10 gels	NP0322BOX
NuPAGE 4–12% Bis-Tris Protein Gels, 1.0 mm, 12-well	2 gels	NP0322PK2
NuPAGE 4–12% Bis-Tris Protein Gels, 1.0 mm, 15-well	10 gels	NP0323BOX
NuPAGE 4–12% Bis-Tris Protein Gels, 1.0 mm, 15-well	2 gels	NP0323PK2
NuPAGE 4–12% Bis-Tris Protein Gels, 1.0 mm, 17-well	10 gels	NP0329BOX
NuPAGE 4–12% Bis-Tris Protein Gels, 1.0 mm, 17-well	2 gels	NP0329PK2
NuPAGE 4–12% Bis-Tris Protein Gels, 1.0 mm, 9-well	1 box	NP0327BOX

Ordering information

Product	Unit size	Cat. No.
NuPAGE 4–12% Bis-Tris Protein Gels, 1.5 mm, 10-well	10 gels	NP0335BOX
NuPAGE 4–12% Bis-Tris Protein Gels, 1.5 mm, 10-well	2 gels	NP0335PK2
NuPAGE 4–12% Bis-Tris Protein Gels, 1.5 mm, 15-well	10 gels	NP0336BOX
NuPAGE 4–12% Bis-Tris Protein Gels, 1.5 mm, 15-well	2 gels	NP0336PK2
NuPAGE Bis-Tris Midi Gels (8 cm x 13 cm)		
NuPAGE 10% Bis-Tris Midi Protein Gels, 1 2+2-well	1 box	WG1201BOX
NuPAGE 10% Bis-Tris Midi Protein Gels, 12+2-well, w/adapters	1 box	WG1201A
NuPAGE 10% Bis-Tris Midi Protein Gels, 20-well	1 box	WG1202BOX
NuPAGE 10% Bis-Tris Midi Protein Gels, 20-well, w/adapters	1 box	WG1202A
NuPAGE 10% Bis-Tris Midi Protein Gels, 26-well	1 box	WG1203BOX
NuPAGE 10% Bis-Tris Midi Protein Gels, 26-well, w/adapters	1 box	WG1203A
NuPAGE 4–12% Bis-Tris Midi Protein Gels, 12+2-well	1 box	WG1401BOX
NuPAGE 4–12% Bis-Tris Midi Protein Gels, 12+2-well, w/adapters	1 box	WG1401A
NuPAGE 4–12% Bis-Tris Midi Protein Gels, 20-well	1 box	WG1402BOX
NuPAGE 4–12% Bis-Tris Midi Protein Gels, 20-well, w/adapters	1 box	WG1402A
NuPAGE 4–12% Bis-Tris Midi Protein Gels, 26-well	1 box	WG1403BOX
NuPAGE 4–12% Bis-Tris Midi Protein Gels, 26-well, w/adapters	1 box	WG1403A
NuPAGE 8% Bis-Tris Midi Protein Gels, 12+2-well	1 box	WG1001BOX
NuPAGE 8% Bis-Tris Midi Protein Gels, 12+2-well, w/adapters	1 box	WG1001A
NuPAGE 8% Bis-Tris Midi Protein Gels, 20-well	1 box	WG1002BOX
NuPAGE 8% Bis-Tris Midi Protein Gels, 20-well, w/adapters	1 box	WG1002A
NuPAGE 8% Bis-Tris Midi Protein Gels, 26-well	1 box	WG1003BOX
NuPAGE 8% Bis-Tris Midi Protein Gels, 26-well, w/adapters	1 box	WG1003A
Novex WedgeWell Tris-Glycine Mini Gels		
Novex WedgeWell Welcome Pack (4–12%, 10-well)	Multiple	XP0412A
Novex WedgeWell Welcome Pack (4–12%, 15-well)	Multiple	XP0412C
Novex WedgeWell Welcome Pack (10%, 10-well)	Multiple	XP0010A
Novex WedgeWell Welcome Pack (10%, 15-well)	Multiple	XP0010C
Novex WedgeWell 6% Tris-Glycine Mini Gel, 10-well	10 per box	XP00060BOX
Novex WedgeWell 6% Tris-Glycine Mini Gel, 12-well	10 per box	XP00062BOX

Product	Unit size	Cat. No.
Novex WedgeWell 6% Tris-Glycine Mini Gel, 15-well	10 per box	XP00065BOX
Novex WedgeWell 8% Tris-Glycine Mini Gel, 10-well	10 per box	XP00080BOX
Novex WedgeWell 8% Tris-Glycine Mini Gel, 12-well	10 per box	XP00082BOX
Novex WedgeWell 8% Tris-Glycine Mini Gel, 15-well	10 per box	XP00085BOX
Novex WedgeWell 10% Tris-Glycine Mini Gel, 10-well	10 per box	XP00100BOX
Novex WedgeWell 10% Tris-Glycine Mini Gel, 12-well	10 per box	XP00102BOX
Novex WedgeWell 10% Tris-Glycine Mini Gel, 15-well	10 per box	XP00105BOX
Novex WedgeWell 10% Tris-Glycine Mini Gel, 10-well	2 per box	XP00100PK2
Novex WedgeWell 12% Tris-Glycine Mini Gel, 10-well	10 per box	XP00120BOX
Novex WedgeWell 12% Tris-Glycine Mini Gel, 12-well	10 per box	XP00122BOX
Novex WedgeWell 12% Tris-Glycine Mini Gel, 15-well	10 per box	XP00125BOX
Novex WedgeWell 14% Tris-Glycine Mini Gel, 10-well	10 per box	XP00140BOX
Novex WedgeWell 14% Tris-Glycine Mini Gel, 12-well	10 per box	XP00142BOX
Novex WedgeWell 14% Tris-Glycine Mini Gel, 15-well	10 per box	XP00145BOX
Novex WedgeWell 16% Tris-Glycine Mini Gel, 10-well	10 per box	XP00160BOX
Novex WedgeWell 16% Tris-Glycine Mini Gel, 12-well	10 per box	XP00162BOX
Novex WedgeWell 16% Tris-Glycine Mini Gel, 15-well	10 per box	XP00165BOX
Novex WedgeWell 18% Tris-Glycine Mini Gel, 10-well	10 per box	XP00180BOX
Novex WedgeWell 18% Tris-Glycine Mini Gel, 12-well	10 per box	XP00182BOX
Novex WedgeWell 18% Tris-Glycine Mini Gel, 15-well	10 per box	XP00185BOX
Novex WedgeWell 4–12% Tris-Glycine Mini Gel, 10-well	10 per box	XP04120BOX
Novex WedgeWell 4–12% Tris-Glycine Mini Gel, 12-well	10 per box	XP04122BOX
Novex WedgeWell 4–12% Tris-Glycine Mini Gel, 15-well	10 per box	XP04125BOX
Novex WedgeWell 4–12% Tris-Glycine Mini Gel, 10-well	2 per box	XP04120PK2
Novex WedgeWell 4–20% Tris-Glycine Mini Gel, 10-well	10 per box	XP04200BOX
Novex WedgeWell 4–20% Tris-Glycine Mini Gel, 12-well	10 per box	XP04202BOX
Novex WedgeWell 4–20% Tris-Glycine Mini Gel, 15-well	10 per box	XP04205BOX
Novex WedgeWell 4–20% Tris-Glycine Mini Gel, 10-well	2 per box	XP04200PK2
Novex WedgeWell 8–16% Tris-Glycine Mini Gel, 10-well	10 per box	XP08160BOX

Product	Unit size	Cat. No.
Novex WedgeWell 8–16% Tris-Glycine Mini Gel, 12-well	10 per box	XP08162BOX
Novex WedgeWell 8–16% Tris-Glycine Mini Gel, 15-well	10 per box	XP08165BOX
Novex WedgeWell 10–20% Tris-Glycine Mini Gel, 10-well	10 per box	XP10200BOX
Novex WedgeWell 10–20% Tris-Glycine Mini Gel, 12-well	10 per box	XP10202BOX
Novex WedgeWell 10–20% Tris-Glycine Mini Gel, 15-well	10 per box	XP10205BOX
Novex Tris-Glycine Midi Gels (8 cm x 13 cm)		
Novex 10% Tris-Glycine Midi Protein Gels, 12+2-well	1 box	WT0101BOX
Novex 10% Tris-Glycine Midi Protein Gels, 12+2-well, w/adapters	1 box	WT0101A
Novex 10% Tris-Glycine Midi Protein Gels, 20-well	1 box	WT0102BOX
Novex 10% Tris-Glycine Midi Protein Gels, 20-well, w/adapters	1 box	WT0102A
Novex 10% Tris-Glycine Midi Protein Gels, 26-well	1 box	WT0103BOX
Novex 10% Tris-Glycine Midi Protein Gels, 26-well, w/adapters	1 box	WT0103A
Novex 12% Tris-Glycine Midi Protein Gels, 12+2-well	1 box	WT0121BOX
Novex 12% Tris-Glycine Midi Protein Gels, 12+2-well, w/adapters	1 box	WT0121A
Novex 12% Tris-Glycine Midi Protein Gels, 20-well	1 box	WT0122BOX
Novex 12% Tris-Glycine Midi Protein Gels, 20-well, w/adapters	1 box	WT0122A
Novex 12% Tris-Glycine Midi Protein Gels, 26-well	1 box	WT0123BOX
Novex 12% Tris-Glycine Midi Protein Gels, 26-well, w/adapters	1 box	WT0123A
Novex 4–12% Tris-Glycine Midi Protein Gels, 12+2-well	1 box	WT4121BOX
Novex 4–12% Tris-Glycine Midi Protein Gels, 12+2-well, w/adapters	1 box	WT4121A
Novex 4–12% Tris-Glycine Midi Protein Gels, 20-well	1 box	WT4122BOX
Novex 4–12% Tris-Glycine Midi Protein Gels, 20-well, w/adapters	1 box	WT4122A
Novex 4–12% Tris-Glycine Midi Protein Gels, 26-well	1 box	WT4123BOX
Novex 4–12% Tris-Glycine Midi Protein Gels, 26-well, w/adapters	1 box	WT4123A
Novex 4–20% Tris-Glycine Midi Protein Gels, 12+2-well	1 box	WT4201BOX
Novex 4–20% Tris-Glycine Midi Protein Gels, 12+2-well, w/adapters	1 box	WT4201A
Novex 4–20% Tris-Glycine Midi Protein Gels, 20-well	1 box	WT4202BOX
Novex 4–20% Tris-Glycine Midi Protein Gels, 20-well, w/adapters	1 box	WT4202A
Novex 4–20% Tris-Glycine Midi Protein Gels, 26-well	1 box	WT4203BOX

Product	Unit size	Cat. No.
Novex 4–20% Tris-Glycine Midi Protein Gels, 26-well, w/adapters	1 box	WT4203A
Novex 8% Tris-Glycine Midi Protein Gels, 12+2-well	1 box	WT0081BOX
Novex 8% Tris-Glycine Midi Protein Gels, 12+2-well, w/adapters	1 box	WT0081A
Novex 8% Tris-Glycine Midi Protein Gels, 20-well	1 box	WT0082BOX
Novex 8% Tris-Glycine Midi Protein Gels, 20-well, w/adapters	1 box	WT0082A
Novex 8% Tris-Glycine Midi Protein Gels, 26-well	1 box	WT0083BOX
Novex 8% Tris-Glycine Midi Protein Gels, 26-well, w/adapters	1 box	WT0083A
Novex 8–16% Tris-Glycine Midi Protein Gels, 12+2-well	1 box	WT8161BOX
Novex 8–16% Tris-Glycine Midi Protein Gels, 12+2-well, w/adapters	1 box	WT8161A
Novex 8–16% Tris-Glycine Midi Protein Gels, 20-well	1 box	WT8162BOX
Novex 8–16% Tris-Glycine Midi Protein Gels, 20-well, w/adapters	1 box	WT8162A
Novex 8–16% Tris-Glycine Midi Protein Gels, 26-well	1 box	WT8163BOX
Novex 8–16% Tris-Glycine Midi Protein Gels, 26-well, w/adapters	1 box	WT8163A
NativePAGE Gels		
NativePAGE 3–12% Bis-Tris Protein Gels, 1.0 mm, 10-well	1 box	BN1001BOX
NativePAGE 3–12% Bis-Tris Protein Gels, 1.0 mm, 15-well	1 box	BN1003BOX
NativePAGE 4–16% Bis-Tris Protein Gels, 1.0 mm, 10-well	1 box	BN1002BOX
NativePAGE 4–16% Bis-Tris Protein Gels, 1.0 mm, 15-well	1 box	BN1004BOX
Novex Tricine Gels		
Novex 10% Tricine Protein Gels, 1.0 mm, 10-well	1 box	EC6675BOX
Novex 10% Tricine Protein Gels, 1.0 mm, 12-well	1 box	EC66752BOX
Novex 16% Tricine Protein Gels, 1.0 mm, 10-well	1 box	EC6695BOX
Novex 16% Tricine Protein Gels, 1.0 mm, 12-well	1 box	EC66952BOX
Novex 16% Tricine Protein Gels, 1.0 mm, 15-well	1 box	EC66955BOX
Novex 10–20% Tricine Protein Gels, 1.0 mm, 10-well	1 box	EC6625BOX
Novex 10–20% Tricine Protein Gels, 1.0 mm, 12-well	1 box	EC66252BOX
Novex 10–20% Tricine Protein Gels, 1.0 mm, 15-well	1 box	EC66255BOX
Novex IEF Gels		
Novex pH 3–7 IEF Protein Gels, 1.0 mm, 12-well	5 gels/box	EC66452BOX
Novex pH 3–7 IEF Protein Gels, 1.0 mm, 10-well	5 gels/box	EC6645BOX

Ordering information

Product	Unit size	Cat. No.
Novex pH 3–10 IEF Protein Gels, 1.0 mm, 10-well	5 gels/box	EC6655BOX
Novex Zymogram Gels		
Novex 12% Zymogram (Casein) Protein Gels, 1.0 mm, 12-well	1 box	EC64052BOX
Novex 4–16% Zymogram (Blue Casein) Protein Gels, 1.0 mm, 10-well	1 box	EC6415BOX
Novex 12% Zymogram (Casein) Protein Gels, 1.0 mm, 10-well	1 box	EC6405BOX
Novex 10% Zymogram (Gelatin) Protein Gels, 1.0 mm, 15-well	1 box	EC61755BOX
Novex 10% Zymogram (Gelatin) Protein Gels, 1.0 mm, 12-well	1 box	EC61752BOX
Novex 10% Zymogram (Gelatin) Protein Gels, 1.0 mm, 10-well	1 box	EC6175BOX
E-PAGE High-Throughput Gel System		
E-PAGE 8% Protein Gels, 48-well	8 gels	EP04808
E-Holder Platform	2 units	EH03
E-PAGE Loading Buffer 1	4.5 mL	EPBUF01
E-PAGE 6% Protein Gels, 96-well	8 gels	EP09606
Daughter E-Base Device	1 unit	EBD03
Mother E-Base Device	1 unit	EBM03

Product	Unit size	Cat. No.
Prepare samples and select buffers: SDS-PAGE		
Pierce SDS-PAGE Sample Prep Kit	50 reactions	89888
Bolt Transfer Buffer (20X)	125 mL	BT0006
Bolt Transfer Buffer (20X)	1 L	BT00061
4X Bolt LDS Sample Buffer	10 mL	B0007
20X Bolt MES SDS Running Buffer	500 mL	B0002
20X Bolt MES SDS Running Buffer	5 L	B0002-02
20X Bolt MOPS SDS Running Buffer	500 mL	B0001
20X Bolt MOPS SDS Running Buffer	5 L	B0001-02
Bolt Antioxidant	15 mL	BT0005
NuPAGE Tris-Acetate SDS Running Buffer (20X)	500 mL	LA0041
NuPAGE MOPS SDS Running Buffer (20X)	500 mL	NP0001
NuPAGE MOPS SDS Running Buffer (20X)	5 L	NP000102
NuPAGE MES SDS Running Buffer (20X)	5 L	NP000202
NuPAGE MES SDS Running Buffer (20X)	500 mL	NP0002
Tris-Glycine SDS Running Buffer (10X)	4 x 1 L	LC26754
Tris-Glycine SDS Running Buffer (10X)	500 mL	LC2675
Tris-Glycine SDS Running Buffer (10X)	5 L	LC26755
Tricine SDS Running Buffer (10X)	500 mL	LC1675

Product	Unit size	Cat. No.
NuPAGE LDS Sample Buffer (4X)	10 mL	NP0007
Tricine SDS Sample Buffer (2X)	20 mL	LC1676
Tris-Glycine SDS Sample Buffer (2X)	20 mL	LC2676
Tris-Glycine Transfer Buffer (25X)	500 mL	LC3675
NuPAGE Transfer Buffer (20X)	125 mL	NP0006
NuPAGE Transfer Buffer (20X)	1 L	NP00061
NuPAGE Antioxidant	15 mL	NP0005
Tris-Glycine SDS Buffer Kit	1 kit	LC2677
NuPAGE MOPS SDS Buffer Kit (for Bis-Tris Gels)	1 kit	NP0050
NuPAGE MES SDS Buffer Kit (for Bis-Tris Gels)	1 kit	NP0060
NuPAGE Tris-Acetate SDS Buffer Kit (for Tris-Acetate gels), <i>Contains 1 ea. LA0041, NP0004, NP0005, NP0007</i>	1 kit	LA0050
Novex Tricine SDS Buffer Kit, <i>includes LC1676 & LC1675</i>	1 kit	LC1677
Pierce LDS Sample Buffer, Non-Reducing (4X)	5 mL	84788
Pierce Lane Marker Non-Reducing Sample Buffer	5 mL	39001
Pierce 10X Tris-Glycine SDS Buffer	1 L	28362
BupH Tris-Glycine-SDS Buffer Packs	40 packs	28378
Native Electrophoresis		
Novex Tris-Glycine Native Running Buffer (10X)	500 mL	LC2672
Novex Tris-Glycine Native Sample Buffer (2X)	20 mL	LC2673
NativePAGE Running Buffer (20X)	1 L	BN2001
NativePAGE Running Buffer Kit	1 kit	BN2007
NativePAGE Cathode Buffer Additive (20X)	250 mL	BN2002
NativePAGE Sample Buffer (4X)	10 mL	BN2003
NativePAGE 5% G-250 Sample Additive	0.5 mL	BN2004
NativePAGE Sample Prep Kit	1 kit	BN2008
DDM (n-dodecyl β-D-maltoside) (10%)	1 mL	BN2005
Digitonin (5%)	1 mL	BN2006
Zymography		
Novex Zymogram Developing Buffer (10X)	500 mL	LC2671
Novex Zymogram Renaturing Buffer (10X)	500 mL	LC2670
IEF		
Novex IEF Anode Buffer (50X)	100 mL	LC5300
Novex IEF Cathode Buffer pH 3–10 (10X)	125 mL	LC5310
Novex IEF Cathode Buffer pH 3–7 (10X)	125 mL	LC5370
Novex pH 3–10 IEF Buffer Kit, <i>Includes LC5300, LC5310, LC5311</i>	1 kit	LC5317
Novex pH 3–7 IEF Buffer Kit, <i>Includes LC5300, LC5370, LC5371</i>	1 kit	LC5377
Novex IEF Sample Buffer pH 3–10 (2X)	25 mL	LC5311
Novex IEF Sample Buffer pH 3–7 (2X)	25 mL	LC5371

Product	Unit size	Cat. No.
Select Protein Standards: Unstained		
PageRuler Unstained Low Range Protein Ladder	2 x 250 µL	26632
PageRuler Unstained Protein Ladder	2 x 250 µL	26614
NativeMark Unstained Protein Standard	5 x 50 µL	LC0725
Prestained		
PageRuler Prestained Protein Ladder	2 x 250 µL	26616
PageRuler Prestained Protein Ladder	10 x 250 µL	26617
PageRuler Plus Prestained Protein Ladder	2 x 250 µL	26619
PageRuler Plus Prestained Protein Ladder	10 x 250 µL	26620
Spectra Multicolor Broad Range Protein Ladder	2 x 250 µL	26634
Spectra Multicolor Broad Range Protein Ladder	10 x 250 µL	26623
HiMark Prestained Protein Standard	250 µL	LC5699
Spectra Multicolor High Range Protein Ladder	2 x 250 µL	26625
Western		
MagicMark XP Western Protein Standard	250 µL	LC5602
MagicMark XP Western Protein Standard	50 µL	LC5603
Specialty		
PageRuler Prestained NIR Protein Ladder	2 x 250 µL	26635
BenchMark Fluorescent Protein Standard	125 µL	LC5928
BenchMark His-tagged Protein Standard	125 µL	LC5606
IEF Marker 3–10	500 µL	39212-01

Product	Unit size	Cat. No.
Electrophoresis chamber systems and power supplies		
Mini Gel Tank	1 unit	A25977
XCell <i>SureLock</i> Mini-Cell	1 unit	EI0001
XCell4 <i>SureLock</i> Midi-Cell	1 each	WR0100
PowerEase 90W Power Supply (115 VAC)	1 each	PS0090
PowerEase 90W Power Supply (230 VAC)	1 each	PS0091
PowerEase 300W Power Supply (115 VAC)	1 each	PS0300
PowerEase 300W Power Supply (230 VAC)	1 each	PS0301

Product	Unit size	Cat. No.
Coomassie stains		
PageBlue Protein Staining Solution	1 L	24620
SimplyBlue SafeStain	1 L	LC6060
SimplyBlue SafeStain	3.5 L	LC6065
Imperial Protein Stain	1 L	24615
Imperial Protein Stain	3 x 1 L	24617
Silver stains		
Pierce Silver Stain Kit	1 L	24612
SilverXpress Silver Staining Kit	1 kit*	LC6100
Pierce Silver Stain for Mass Spectrometry	1 L	24600
*1 kit contains sufficient reagents to stain 25 mini gels		
Fluorescent and specialty stains		
SYPRO Orange Protein Gel Stain	500 µL	S-6650
SYPRO Orange Protein Gel Stain	10 x 50 µL	S-6651
SYPRO Red Protein Gel Stain	500 µL	S-6653
SYPRO Red Protein Gel Stain	10 x 50 µL	S-6654
SYPRO Ruby Protein Gel Stain	1 L	S-12000
SYPRO Ruby Protein Gel Stain	200 mL	S-12001
SYPRO Ruby Protein Gel Stain	5 L	S-21900
Pro-Q Emerald 488 Glycoprotein Gel Stain Kit	1 kit	P-21875
Pro-Q Diamond Phosphoprotein Gel Stain Kit	1 L	P-33300
Pro-Q Diamond Phosphoprotein Gel Stain Kit	200 mL	P-33301
Pro-Q Diamond Phosphoprotein Gel Stain Kit	5 L	P-33302
Pierce Power Stainer		
Pierce Power Stainer	1 unit	22833
Pierce Power Stainer Welcome Pack	1 unit	22833SPCL*
*Welcome pack includes Pierce Power Station, Pierce Power Stain Cassette, Western Blot Roller, Power Cord with C/13 Connector, Quick Start Guide, Pierce Mini Gel Power Staining Kit		