

MERCK

Ready? Set done.

Take control of your day and discover the mPAGE® Lux Casting System for ready-to-use gels in just 3 minutes.



The Life Science business of Merck operates as MilliporeSigma in the U.S. and Canada.

Millipore®

Preparation, Separation,
Filtration & Monitoring Products

Researchers traditionally have few options to meet their protein gel electrophoresis needs.

The mPAGE® Lux Casting System has been designed to provide the **flexibility of hand-cast** protein gels and the **reliability of precast gels**, without the loss of quality, time, or the significantly higher costs that accompany the alternative options.

Making ready-to-use **gels in less than three minutes** is now a thing. With mPAGE® Lux Casting System, you can **say farewell to conventional methods** and their time consuming, manual steps for gel creation. **That's fresh.**



Our commitment to delivering greener workflow solutions enables our customers to carry out their protein resolution research sustainably. Our mPAGE® Lux Gel Casting System delivers benefits from our sustainability initiative in several facets.

- Utilize non-hazardous photo-initiators to replace hazardous reagents, including TEMED and APS.
- Make a gel in 3 minutes compared to 1-2 hours for traditional hand cast workflows.
- Generate up to 26% reduction in the amount of single-use plastic waste per gel.

Features and Benefits

mPAGE® Lux Casting System replaces your gel casting process with faster, simpler, and safer methods with more reproducible results.

Faster

- Cure a mini gel in 90 seconds with the mPAGE® Lux Casting System compared to conventional methods that take more than 90 minutes.
- Quick casting workflow with UV irradiation to expedite curing of mPAGE® Lux Reagents.
- Bis-Tris gel chemistry allows for shorter run times compared to conventional methods.

Scalable

- mPAGE® Lux Reagent Kit, mPAGE® TurboMix Reagent Kit, and mPAGE® precast gels all use Bis-Tris chemistry and share the same running buffers and gel stains.

Simple and Reproducible

- One step photopolymerization using precise system controls.
- Fewer preparation steps with less chance of error.
- mPAGE® Caster prevents leakage.
- Superior band quality compared to hand-cast Tris-Glycine gels.

Safer

- Less toxic chemicals used. No APS or TEMED required.
- Less toxic waste compared to traditional methods.

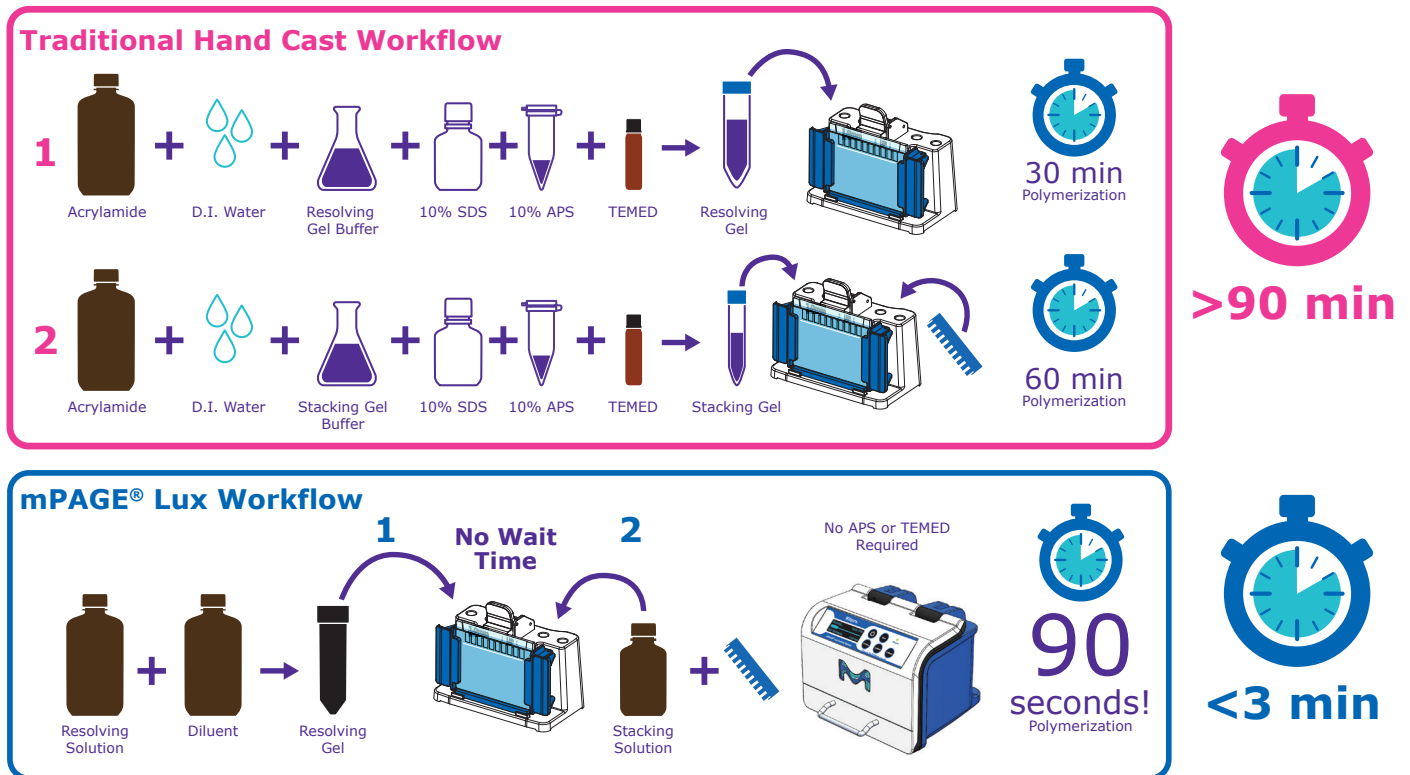


Figure 1: Traditional Gel Casting vs the mPAGE® Lux Workflow.

The mPAGE® Lux Casting system has fewer overall steps, reduced polymerization time, and toxic waste compared to traditional gel casting technology. Gels created with the mPAGE® Lux Casting System are compatible with the mPAGE® Mini-gel Tank and the Bio-Rad® Mini-PROTEAN™ Cells. For outstanding resolution and reduced run times, use our mPAGE® buffers. Lux gels are compatible with Bis-Tris compatible buffers and staining reagents.

Take control of your day

While often cited as a more economical solution, conventional hand-cast gel methods are time consuming, requiring many hands-on steps which may result in inconsistent gel formulations. The quality of hand-cast gels and the data they may help generate rely on formulation consistency so that precious samples and time are ultimately not wasted with gel failures.

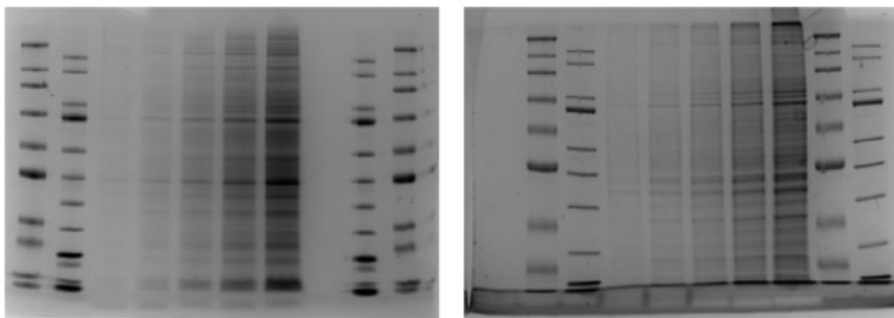


Figure 2: Data quality comparison with mPAGE® Lux Bis-Tris gel and hand-cast tris-glycine gel.

Band quality of mPAGE® Lux Bis-Tris gel (left) compared to hand-cast tris-glycine gel (right). Both gels are 10% acrylamide and loaded with a titration of A431 human cell lysate. Electrophoresis run time is 42 minutes at 200V (mPAGE® Lux gel) and 119 minutes at 120V (tris-glycine gel). Gels are stained with ReadyBlue™ Coomassie gel stain.



The **mPAGE® Lux Casting System** offers an innovative solution to your gel casting process. You no longer must choose either saving time or resources. Our novel gel casting system allows researchers to easily cast their gels quickly when they need them, at a fraction of the cost of precast gel technologies. Improve your lab efficiency and upgrade your gel electrophoresis workflow with the mPAGE® Lux Casting System.

Transfer method:	Wet	Wet	Turbo Mixed MW	Semi-Dry
Transfer buffer:	mPAGE® transfer buffer	Towbin buffer	Trans-Blot® Turbo™ transfer buffer	Towbin buffer
EGFR			Not recommended for high MW proteins	
ErK1/2				

Figure 3: Western blotting for wet, fast, and semi-dry transfer method comparison.

Comparisons were performed using 12% mPAGE® Lux Bis-Tris gels that were run with a titration of A431 human cell lysate and various transfer methods onto Immobilon®-P membranes. Turbo transfer used the Bio-Rad® Trans-Blot® Turbo™ Transfer System and Trans-Blot® Turbo™ Transfer Packs. Membranes were blotted with anti-EGFR and anti-ErK1/2 antibodies, then detected with Immobilon® ECL Ultra Western HRP substrate.

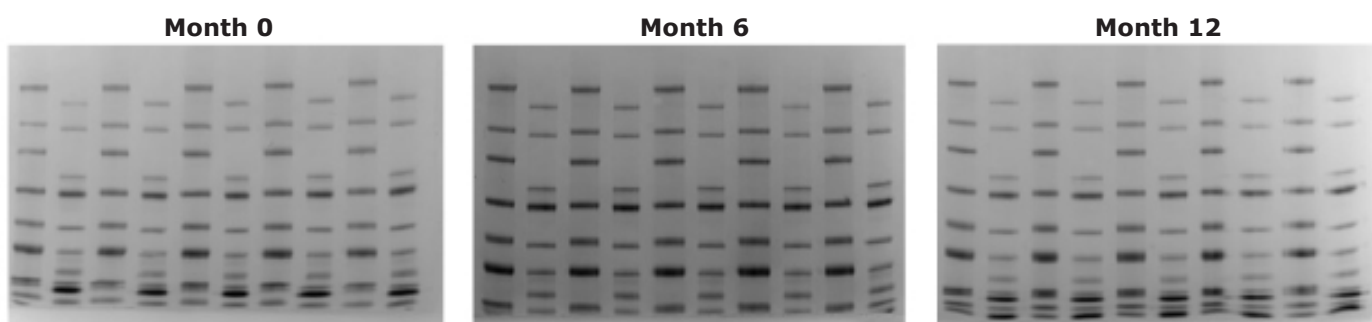
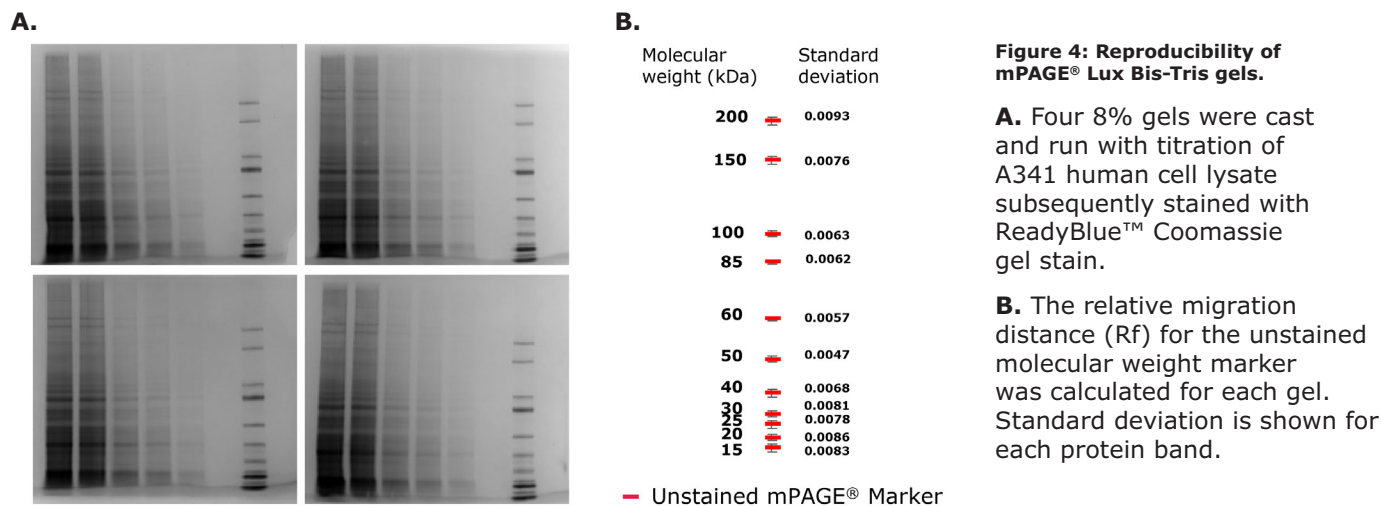


Figure 5: mPAGE® Lux Bis-Tris reagent shelf life analysis.

mPAGE® Lux Bis-Tris gels cast using reagents 0, 6, or 12 months old. No difference is observed in running pattern or run time.

“mPAGE® Lux Casting System is much faster than my conventional method. I usually spend 2 hours for making gels. It is 1.5 min with this system. Usually I cast gel for pAKT, because I can't see it with precast gel. Even with conventional hand cast gel, it is very weak band. With mPAGE® Lux Casting System, I can see the band very clearly. I like this. I am very happy with it.”

Dr. Shizuka Takaku
Tokyo Metropolitan Institute of Medical Science

system components

mPAGE® Lux Casting System

The system consists of:

- mPAGE® Lux Curing Station
- mPAGE® Lux Mixing Tube
- mPAGE® Gel Caster
- mPAGE® Comb with 10 wells and 15 wells
- mPAGE® Mini Spacer Plate
- mPAGE® Lux Masked Short Plates with 10 wells and 15 wells

For the 0.75 mm thickness mPAGE® Lux Casting system, the 15 well comb and masked short plates are not included.

mPAGE® Lux Bis-Tris Reagent Kit

The reagent kit is a dedicated reagent kit for the mPAGE® Lux Casting System. The mPAGE® Lux Bis-Tris Reagent Kit consists of 3 components:

- Resolving Solution
- Diluent
- Stacking Solution

The kit supports a variety of acrylamide gels between 8.0-13.5%.

Add mPAGE® Lux Casting System to your lab and have ready-to-use gels in under 3 minutes.

Learn more at SigmaAldrich.com/mPAGELux



mPAGE® Lux Curing Station












mPAGE® Gel Caster
(shown with plates
and comb)




mPAGE® Lux Bis-Tris Reagent Kit

Take a breath and get used to a fast gel casting process with less waste and without the worry of failure. That's fresh.

Ordering Information

Product Name	Description/Quantity	Cat. No.
mPAGE® Lux Casting System		
mPAGE® Lux Casting System, 1 mm*	mPAGE® Lux Curing Station (1)	 LUXCSYS-1M
	mPAGE® Lux Mixing Tube (5)	
	mPAGE® Gel Caster (2)	
	mPAGE® Comb 1.0 mm, 10 wells (5)	
	mPAGE® Comb 1.0 mm, 15 wells (5)	
	mPAGE® Spacer plate 1.0 mm (5)	
	mPAGE® Lux Masked Short Plates 10-combs (5)	
	mPAGE® Lux Masked Short Plates 15-combs (5)	
mPAGE® Lux Casting System, 0.75 mm*	mPAGE® Lux Curing Station (1)	 LUXCSYS-75M
	mPAGE® Lux Mixing Tube (5)	
	mPAGE® Gel Caster (2)	
	mPAGE® Comb 0.75 mm, 10 wells (5)	
	mPAGE® Spacer plate 0.75 mm (5)	
	mPAGE® Lux Masked Short Plates 10-combs (5)	
mPAGE® Lux Casting System, 1.5 mm*	mPAGE® Lux Curing Station (1)	 LUXCSYS-15M
	mPAGE® Lux Mixing Tube (5)	
	mPAGE® Gel Caster (2)	
	mPAGE® Comb 1.5 mm, 10 wells (5)	
	mPAGE® Comb 1.5 mm, 15 wells (5)	
	mPAGE® Spacer plate 1.5 mm (5)	
	mPAGE® Lux Masked Short Plates 10-combs (5)	
	mPAGE® Lux Masked Short Plates 15-combs (5)	
mPAGE® Lux Reagents		
mPAGE® Lux Bis-Tris Reagent Kit	mPAGE® Lux Bis-Tris Resolving Solution (1)	 LUXRGTKIT
	mPAGE® Lux Bis-Tris Diluent (1)	
	mPAGE® Lux Bis-Tris Stacking Solution (1)	
mPAGE® Lux Bis-Tris Resolving Solution	1 bottle	 LUXRGTRRES
mPAGE® Lux Bis-Tris Diluent	1 bottle	 LUXRGTDIL
mPAGE® Lux Bis-Tris Stacking Solution	1 bottle	 LUXRGTSTK
mPAGE® Lux Accessories		
mPAGE® Lux Masked Short Plates 10 wells	5 plates	 LUXSHRTP10W
mPAGE® Lux Masked Short Plates 15 wells	5 plates	 LUXSHRTP15W
mPAGE® Lux Mixing Tube	5 tubes	LUXMIXTB

*Available with NEMA 5-15P (YP12), CEE 7/7 (YP22), type G (YP61), YP18 or Type I (YP03) plugs.

 We invite you to look for this icon and review the DfS Scorecard to support you in making more eco-friendly purchasing decisions.

Learn about our commitment to sustainability at SigmaAldrich.com/sustainability

Products continued on next page.

Product Name	Description/Quantity	Cat. No.
Electrophoresis and Blotting Systems		
mPAGE® Mini Gel Tank, 2-gel	mPAGE® Tank Lid with Electrode Cables (1)	MGT-2
	mPAGE® Tank (1)	
	mPAGE® Primary Electrode Core (1)	
	mPAGE® Buffer Dam (1)	
	mPAGE® Buffer Gel Releasers (5)	
mPAGE® Mini Gel Tank, 4-gel	mPAGE® Tank Lid with Electrode Cables (1)	MGT-4
	mPAGE® Tank (1)	
	mPAGE® Primary Electrode Core (1)	
	mPAGE® Secondary Electrode Core (1)	
	mPAGE® Buffer Dam (1)	
	mPAGE® Buffer Gel Releasers (5)	
mPAGE® Mini Wet Transfer System	mPAGE® Tank Lid with Electrode Cables (1)	MWTS
	mPAGE® Tank (1)	
	mPAGE® Mini Wet Transfer Module (1)	
	mPAGE® Mini Wet Transfer Cassettes (2)	
	mPAGE® Macroporous Sponge (5)	
Power Supplies		
mA700 Essential Power Supply*		MA700
mA400 Basic Power Supply*		MA400
SDS-PAGE and Transfer Reagents		
mPAGE® Color Protein Standard		MPSTD4
mPAGE® Unstained Protein Standard		MPSTD3
mPAGE® Western Protein Standard		MPSTD2
MES SDS running buffer powder for mPAGE® Bis-Tris gels, each packet makes 1 L		MPMES
MOPS SDS running buffer powder for mPAGE® Bis-Tris gels, each packet makes 1 L		MPMOPS
mPAGE® Transfer Buffer Powder, each packet makes 1 L		MPTRB
Immobilon®-P PVDF Transfer Membrane		IPVH85R
Immobilon®-E PVDF Transfer Membrane		IEVH85R
Immobilon®-FL PVDF Transfer Membrane		IPFL85R
Immobilon®-PSQ PVDF Transfer Membrane		ISEQ85R
Immobilon®-NC Transfer Membrane		HATF85R
Immobilon® NOW Dispenser		IMDISP

*Available with NEMA 5-15P (YP12), CEE 7/7 (YP22), type G (YP61), YP18 or Type I (YP03) plugs.



To place an order or receive technical assistance in Europe, please call Customer Service:

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Italy: 848 845 645

United Kingdom: 0870 900 4645

For other countries across Europe, please call: +44 (0) 115 943 0840

Or visit: [MerckMillipore.com/offices](https://www.MerckMillipore.com/offices)

For Technical Service visit: [MerckMillipore.com/techservice](https://www.MerckMillipore.com/techservice)

We have built a unique collection of life science brands with unrivalled experience in supporting your scientific advancements.

Millipore® Sigma-Aldrich® Supelco® Milli-Q® SAFC® BioReliance®

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