Quick Start Guide

mPAGE® Lux Bis-Tris Gel Casting System

mPAGE® Lux Curing Station

mPAGE® Lux Bis-Tris Reagent Kit

FOR RESEARCH USE ONLY

Not for use in diagnostic procedures.
Not for human or animal consumption.

Gel Solution Preparation

Important: Protect all solutions from light to prevent polymerization. Before casting, bring all solutions to room temperature.

Resolving Gel

Prepare Resolving Gel Solution by mixing Resolving Solution and Diluent.

1. Use the Solution Volume Worksheet on page 3 to calculate required mixing volumes. Resolving Gel Solution may be prepared in a large batch to make several gels sequentially.
2. Using a clean pipette, add required amount of Resolving Solution to provided black mixing tube or other opaque container.
3. Using a clean pipette, add required amount of Diluent to the same mixing tube.
4. Mix by turning container end over end. **Do not vortex**.

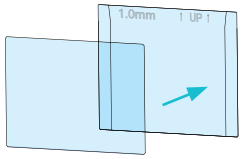
Stacking Gel

The Stacking Solution is ready to use directly from the bottle. See the Solution Volume Worksheet on page 3.

Important: Do not dilute Stacking Solution.

Gel Casting

1. Clean glass plates with mild detergent and rinse with DI water. Wipe with 70% Ethanol before use.
2. Assemble mPAGE® Gel Caster using mPAGE® Spacer Plate and mPAGE® Short Plate to form glass cassette. Ensure that both glass plates are aligned at the bottom of the caster frame before closing caster clamps.



Note: If using mPAGE® Lux Mask Short Plate, refer to full user guide for assembly instructions (available on the mPAGE® Lux product page at SigmaAldrich.com).

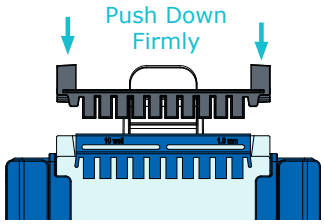
3. Power on mPAGE® Lux Curing Station by pressing the power button ⏻. The Curing Station will initiate a self test. After self test is complete, the ready screen will appear.

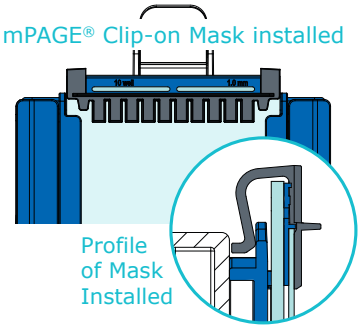
4. Open door and place gel caster into Curing Station, aligning the Gel Caster ***behind*** the bumpers.
5. Using a clean 5 mL pipette, add prepared Resolving Gel Solution to the indicated fill line on the mPAGE® Gel Caster frame.
6. Using a clean 5 mL pipette, slowly add Stacking Solution up to the top of the short plate.
7. Slowly insert the mPAGE® comb at an angle to prevent air bubble formation under teeth.
8. Wipe solution spill-over from front of short plate.
9. With the hooks in the back, firmly push the mPAGE® Clip-on Mask down, over glass cassette until it completely covers the comb teeth. The mPAGE® Clip-on Mask prevents the gel from curing around the comb.

   Note: Pushing front of plates during installation may cause gel to seep out.

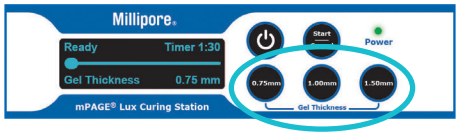
   Important: Mixing different well formats may result in improper well formation. Use:

   - 10-well combs with 10-well mPAGE® Clip-on Mask
   - 15-well combs with 15-well mPAGE® Clip-on Mask





10. Close Curing Station door and select gel thickness.



11. Press Start to begin gel curing.

    Note: If casting multiple gels, the second gel caster can be assembled while the first is curing.

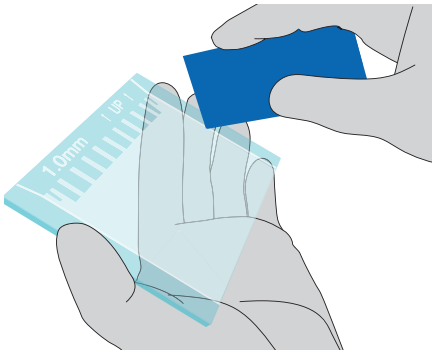
12. After curing is complete, open door and remove Gel Caster. Remove mPAGE® Clip-on Mask. Remove cassette from Gel Caster by lowering the tension clip to release the caster frame. Then open the sides of the frame and slide cassette out from top.

    Option: After curing, The mPAGE® Clip-on Mask can be removed from the Gel Caster while it is in the mPAGE® Lux Curing Station.

Use gel immediately or wrap the cassette in wet paper towel and store laying flat in a zip top bag or other airtight container at 2-8 °C for up to 2 weeks. Do not leave cassettes unwrapped as the gel will dry out.

How to Remove Gel After Electrophoresis

Remove the gel from glass cassette using a gel scraper. Cut along gel edges (as shown) to avoid gel tearing.



mPAGE® Lux Bis-Tris gels should ONLY be used with MOPS-SDS or MES-SDS running buffer. Bis-Tris gels are NOT compatible with Tris-Glycine running buffer. See the User Guide for recipes.

See complete mPAGE® Lux Casting System User Guide for process details, suggested electrophoresis and transfer conditions, and troubleshooting.

Solution Volume Worksheet

Using a dry erase marker, calculate the solution volumes in the table below.

For Resolving Solution

Gel %	Resolving Solution		Diluent		Total Volume
8%	**2 mL** x number of gels x gel thickness =	mL	+ **3 mL** x number of gels x gel thickness =	mL	= mL
10%	**2.5 mL** x number of gels x gel thickness =	mL	+ **2.5 mL** x number of gels x gel thickness =	mL	= mL
12%	**3 mL** x number of gels x gel thickness =	mL	+ **2 mL** x number of gels x gel thickness =	mL	= mL
13.5%	**3.3 mL** x number of gels x gel thickness =	mL	+ **1.7 mL** x number of gels x gel thickness =	mL	= mL

For Stacking Solution

Gel %	Stacking Solution		Total Volume
5%	1.5 mL	x number of gels x gel thickness =	mL

Notice

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