



# BLOTTING

## Trans-Blot® Turbo™ Transfer System

### RTA Transfer Kits

#### Quick Start Guide

## Instructions for Using Ready-to-Assemble Kits

### Kit Contents

- 40 membranes (nitrocellulose, PVDF, or LF PVDF)
- 80 transfer stacks (one stack comprises 7 layers of filter pads)
- 5x transfer buffer\* (1 L for mini-sized kit, 2 L for midi-sized kit)
- 2 gel trays for wetting and equilibrating membranes and transfer stacks

### Instructions

#### 1. Wet and equilibrate membrane and two transfer stacks.

- **Nitrocellulose membrane** – immerse in 30 ml of 1x transfer buffer for 2–3 min
- **PVDF & LF PVDF membranes** – immerse in 100% MeOH or EtOH until membrane is translucent, then transfer to a gel tray containing 30 ml of 1x transfer buffer. Ensure that membrane is submerged. Equilibrate membrane for 2–3 min
- **Transfer stacks** – immerse two stacks separated by blue sheets to a gel tray containing 50 ml of transfer buffer for 2–3 min

#### 2. Place one wetted stack on bottom of cassette. This will serve as the bottom ion reservoir stack.

#### 3. Place wetted membrane on top of wetted stack in the cassette.

#### 4. Place gel on membrane.

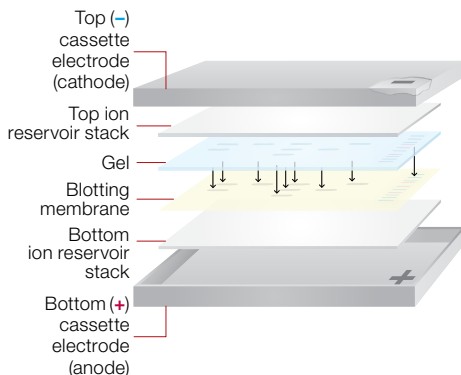
- Do not equilibrate the gel before transfer
- If needed, remove any air bubbles with blot roller
- 2 mini gels: place foot of gel toward the center

#### 5. Place second wetted transfer stack on top of gel. This will serve as the top ion reservoir stack.

- Roll the assembled sandwich with the blot roller to expel trapped air bubbles

#### 6. Close and lock cassette lid. Insert the cassette in the instrument and begin transfer.

\* To prepare 1 liter of 1x transfer buffer, mix 200 ml of 5x transfer buffer with 600 ml of nanopure water and 200 ml of ethanol.



**BIO-RAD**

Combination	Acceptable*		Not Acceptable*	
	1	2	1	2
Upper Bay A	1 mini gel	2 mini gels or 1 midi gel	1 mini gel	2 mini gels or 1 midi gel
Lower Bay B	1 mini gel	2 mini gels or 1 midi gel	2 mini gels or 1 midi gel	1 mini gel

\* Conditions hold if trays are swapped.

### Bio-Rad Preprogrammed Protocols

Protocol Name	MW, kD	Time, min	2 Mini Gels or 1 Midi Gel	1 Mini Gel
STANDARD SD	Any	30	Up to 1.0 A; 25 V constant	
1.5 MM GEL	Any	10	2.5 A constant; up to 25 V	1.3 A constant; up to 25 V
HIGH MW	>150	10		
LOW MW	<30	5		
MIXED MW*	5–150	7		
1 Mini TGX™**	5–150	3	N/A	2.5 A constant; up to 25 V

\* Also accessed via the TURBO navigation button.

### Notes for Efficient Transfer

- Gels do not require equilibration and can be transferred immediately after electrophoresis
- Assembled sandwiches will be warm after transfer. Avoid drying the membrane during sandwich assembly
- After transfer is complete, cassettes are immediately ready for another transfer; no cooling period is required

### Ordering Information

Catalog #	Description
170-4270	<b>Trans-Blot Turbo RTA Transfer Kit, Mini, Nitrocellulose</b> , for 40 blots
170-4271	<b>Trans-Blot Turbo RTA Transfer Kit, Midi, Nitrocellulose</b> , for 40 blots
170-4272	<b>Trans-Blot Turbo RTA Transfer Kit, Mini, PVDF</b> , for 40 blots
170-4273	<b>Trans-Blot Turbo RTA Transfer Kit, Midi, PVDF</b> , for 40 blots
170-4274	<b>Trans-Blot Turbo RTA Transfer Kit, Mini, LF PVDF</b> , for 40 blots
170-4275	<b>Trans-Blot Turbo RTA Transfer Kit, Midi, LF PVDF</b> , for 40 blots

For more information visit [www.bio-rad.com/transblotturbo](http://www.bio-rad.com/transblotturbo).

For technical support, call 1-800-4BIO-RAD (1-800-424-6723) or visit us at [www.bio-rad.com](http://www.bio-rad.com).