BLOTTING

Trans-Blot® Turbo™ Transfer System RTA Transfer Kits

Quick Start Guide

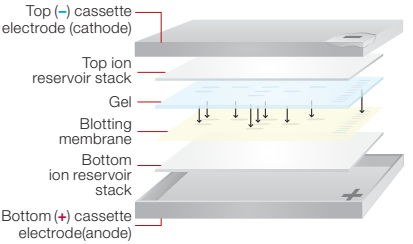
Instructions for Using Ready-to-Assemble Kits

Kit Contents

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

Instructions

1. Prepare 1 liter of 1x transfer buffer by mixing 200 ml of 5x transfer buffer with 600 ml of nanopure water and 200 ml of ethanol (reagent grade ~85% or molecular biology grade ~95%–98% purity).
2. 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 in a gel tray containing 50 ml of transfer buffer for 2–3 min
3. Place one wetted stack on bottom of cassette. This will serve as the bottom ion reservoir stack.
4. Place wetted membrane on top of wetted stack in the cassette.
5. 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
6. 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
   - Please refrain from adding any extra transfer buffer to the cassette; saturated transfer stacks provide ample transfer buffer
7. Close and lock cassette lid. Insert the cassette in the instrument and begin transfer.



BIO-RAD

	Acceptable*		Not Acceptable*	
Combination	**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

- It is essential to prepare the 1x transfer buffer using ethanol as described in step 1
- 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	**Trans-Blot Turbo RTA Transfer Kit, Mini, Nitrocellulose**, for 40 blots
170-4271	**Trans-Blot Turbo RTA Transfer Kit, Midi, Nitrocellulose**, for 40 blots
170-4272	**Trans-Blot Turbo RTA Transfer Kit, Mini, PVDF**, for 40 blots
170-4273	**Trans-Blot Turbo RTA Transfer Kit, Midi, PVDF**, for 40 blots
170-4274	**Trans-Blot Turbo RTA Transfer Kit, Mini, LF PVDF**, for 40 blots
170-4275	**Trans-Blot Turbo RTA Transfer Kit, Midi, LF PVDF**, for 40 blots

Visit **bio-rad.com/transblotturbo** for more information.
Call 1-800-4BIO-RAD (1-800-424-6723) or visit us at **bio-rad.com** for technical support.