Bandmate[™] Automated Western Blot Processor

Catalog Numbers BW1000

Pub. No. MAN0018648 Rev. A.0

Product description

For more detailed information, refer to the Bandmate[™] Automated Western Blot Processor User Manual (Pub. No. MAN0018649) at http://www.thermofisher.com/WesternProcessor.



Fig. 1 Processor internal parts

- ① Reagent tubes (antibody
- reservoirs)
- ② Wash buffer tubing
- ③ Rocker cradle
- ④ Tray cover

- ⑤ Sample tray
- 6 Reagent slider
- ⑦ Waste and recovery funnel tray
- ⑧ Waste tank compartment (behind door panel)
- Table 1 Instrument icons

Icon	Function	lcon	Function
\checkmark	Accept	3	Fill
\leftarrow	Back	*	Home
×	Cancel (Stop)	"	Pause
\rightarrow	Continue	D	Run
$\overline{\mathbf{r}}$	Drain	E	Save
di la companya di seconda di se Seconda di seconda di se	Edit		

Create a custom program

- 1. From the home screen, select **Programs**. A list of programs with default times will appear.
- **2.** Select a default program using the dial. Select **Edit** to modify the program to generate a custom protocol.
 - a. Enter a name for the custom protocol. Select letters and numbers by turning the dial. Use the cluster of 4 buttons at the lower left of the screen to navigate back and forth between characters and to delete characters or add spaces. When finished, press the **Save** button to save program name, and then press **Continue** to move to the next screen.

- **b.** Select whether the protocol will be used with a mini blot tray (2 chambers with a central divider), or a midi blot tray (one large chamber). Press **Save**, then press **Continue** to move to the next screen.
- c. Choose whether a rinse step is required in the protocol. A rinse will dispense 10 mL of wash buffer at the end of each step. If a rinse is desired, highlight Enable on the screen and then press Save. Press Continue.
- **d**. On the last screen, input the times and reagents for each step in your protocol. Buffer wash steps can be repeated up to 9 times, but reagent steps (antibody additions) cannot be repeated. When selecting the reagent, the following may be chosen: Buffer; Reagent 1; Reagent 2; and END. Use the cluster of 4 buttons to highlight what needs to be modified and use the knob to move through the selection. Selecting **END** indicates that there are no more steps.

Table 2Example program whereby in step 1 the blockingsolution is already in tray and contains 2 reagent (antibodyaddition) steps.

Step	Reagent	
1	_	
2	Buffer	
3	Reagent 1	
4	Buffer	
5	Reagent 2	
6	Buffer	
7	End	

e. Choose the antibody recovery option if antibodies need to be recovered for future use. Recovered reagents will be diverted to the tubes held in the brackets on either side of the waste tank. If antibodies don't need to be recovered, all reagent steps may be set to **Waste**. Touch **Save**.

Use the processor

- 1. Turn the power switch on the back of the unit to the "on" position. The display will illuminate and the moving parts will return to their home positions. After a few seconds, the home screen will display.
- 2. Fill the buffer bottle in the back of the processor. Ensure that the hose hanging from the cap reaches the bottom of the bottle. Leave the cap loose to allow air into the bottle.
- **3.** Fill the buffer tubing and select **Flush** to remove air bubbles from the tubing. Press **Accept**. The wash buffer will dispense into the waste tray. Press **Fill** until wash buffer is dispensed from the nozzles (may take several seconds).
- **4.** If using primary and secondary antibodies, 2 reagent tubes will be required for each blot being processed. Screw 1 tube firmly and completely into the primary antibody position 1 (toward the back of the slider), and the other into the secondary antibody position 2, just behind the buffer dispensing nozzle.
- 5. Pipet the appropriate antibody solution into each tube. A standard-sized mini blot processed in a mini blot tray requires a minimum of 3.5 mL. A standard-sized midi blot processed in a midi blot tray requires a minimum of 7.5 mL.



6. Add the blocking buffer of choice to the trays selected for processing. Place blot(s) protein-side up, with the lanes running front to back. If using a mini blot tray that has a central divider, make sure the blot is on the same side of the divider as the appropriate antibody tubes. Replace the tray cover and make sure it is fully seated.

Note: Use no more than 40 mL of blocking buffer per mini blot and 80 mL of blocking buffer for midi blot trays.

- 7. Check the waste tank to make sure it is empty and place 50-mL tubes into the tube holders if antibody recovery is desired.
- **8.** Ensure the funnel tray and waste trays are pushed all the way to the back and in place. Close the waste compartment door and the work area windows.
- Program or select your preferred Western blot protocol (see "Create a custom program" on page 1) from the menu and touch Run.
- **10.** On the next screen, select the trays which will be used for the protocol. Follow instructions on the screen to indicate which section(s) are in use.
- 11. Press Continue.
- 12. Press Run.
- **13.** Once the run is complete, press **Home** to stop the rocker and return to the home screen. Open the window and remove the sample tray. The blot is now ready for downstream processing (chemiluminescent or colorimetric detection) and/or immediate imaging (fluorescence).

Shut down and clean up

• Wash and rinse the sample tray, cover, and funnel tray using a gentle laboratory detergent and water.

Note: Do not rest sample tray on reagent tube puncturing pins.

- Empty the waste tank. Wash and rinse using a gentle laboratory detergent and water.
- Clean the reagent slider bar and the buffer tubing connection to prevent salt and proteins from drying and contaminating the processor.
- Wipe down the interior of instrument and tray holders using a damp cloth or towel.
- If the processor will not be used for a few days, flush the buffer line with distilled water. To do this, place the wash buffer hose into a container of distilled water and select the **Flush** function to run water through the line and into the tray.

Limited product warranty

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For descriptions of symbols on product labels or product documents, go to thermofisher.com/symbols-definition.

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