GenScript
Make Research Easy

User Manual

eBlot™ L2

Fast Protein Transfer Device

For High Quality Wet Protein Transfer

Version：V1

Cat. No：L00981

CONTENTS

Important Notice

Users must read this manual in its entirety before operating eBlot™ L2 Fast Transfer System, while paying close attention to the safety precautions listed in this manual.

Version：V1; Date: 20240115

Please be aware that GenScript will not be held responsible for any personal injury or damage to the instrument caused by failure to follow the instructions provided in the manual.

Safety

Please follow the operation instructions provided in this manual

Do not place the instrument at a location prone to vibrations

eBlot™ L2 is intended for laboratory use only

Place the equipment on a level laboratory bench and ensure clean and ventilated surroundings

Improper operation may result in damage to the equipment

Users should not dismantle the equipment themselves to avoid equipment damage or personal injury

Original packaging must be used for equipment transportation

 Warning sign

 Electrical shock warning sign

For research use only. Not intended for diagnostic use.

Quick Guide

Instructions for transferring mini or midi gels using eBlot™ L2

* Please read and follow the instructions carefully if you are first-time user of eBlot™ L2

1 Preparation

Reagents

- Diluted eBlot L2 Transfer Buffer (300 mL/Standard transfer)
- Diluted eBlot L2 Equilibrium Buffer (60 mL per membrane in the plastic container provided)
- Distilled water (250 mL per transfer in the silver tray provided)

Note: Regularly empty the waste container

Other Materials

- Pre-run PAGE gel
- NC membrane or Pre-activated PVDF membrane
- Dry transfer sponges (2 pieces per transfer)

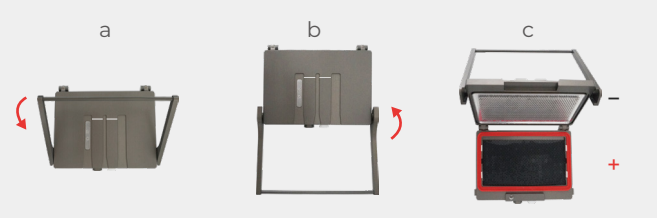
2 Opening of Transfer Cassette

Place the transfer cassette on the bench as shown below.

a. Release the cassette latch by rotating it upward.

b. Lift the latch and fully open the cassette cover to approximately > 90°.

Note: The anode side is marked with a red sealing strip.



3 Preparation of Gel and Membrane

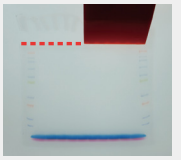
Rinse the gel cassette under running water (5 seconds) to remove remaining running buffer. Open the gel cassette and cut off the gel well fingers. Place the gel and membrane in the eBlot L2 Equilibrium buffer for 1 minute*.

Note:

a. Cut off any uneven part of the pre-cast gel, or the stacking gel of the home-made gel.

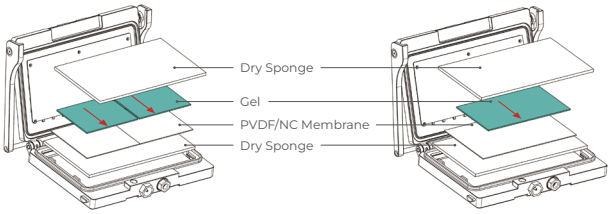
b. Pre-wet the PVDF membrane with alcohol before equilibrium.

* The gel equilibrium time should NOT exceed 5 minutes.



4 Assembly of Transfer Sandwich

On the red anode side, place the materials in the following order: dry sponge, equilibrated membrane, equilibrated gel. Use the roller to roll out bubbles between the membrane and the gel, then place another piece of dry sponge on top of the gel.



a. Assembly of 2 mini gels

b. Assembly of 1 midi gel

Note:

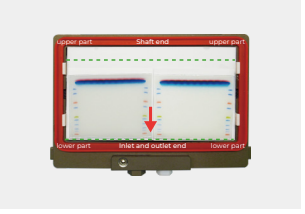
a. Note the correct size of the components: Sponge ≥ Membrane ≥ Gel.

b. Avoid overlapping or touching between two mini gels or two membranes.

c. Place the gel and membrane close to the bottom without exceeding green indication line that represents the edge of the transfer surface.

d. Finish the assembly quickly to prevent from drying out.

e. When transfer only 1 mini gel in the midi cassette, place the mini gel in the middle of the same indicated area.



Tranfer 2 mini gels in one cassette

Transfer 1 midi gel in one cassette

5 Start Transfer

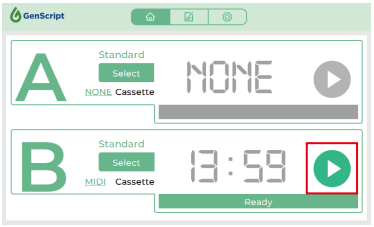
Close the transfer cassette, and insert the assembled cassette into the selected channel with the scale lines completely covered. Press ▶ to initiate the transfer program.

Note:

a. The latch and scale lines are facing toward the user.

b. Start transfer no longer than 5 minutes after the assembly of transfer sandwich.

c. Refer to section 2.2.2 Transfer Program Overview for setting up the programs.



6 Complete Transfer

The device will beep when the countdown reaches 0. Press ■ to return to the initial interface. Remove the transfer cassette from the instrument. Open the transfer cassette, then immediately place the transfer sandwich into a tray containing distilled water. Disassemble the transfer sandwich and take out the membrane and continue with the next step as per your normal protocol. After each transfer, rinse the cassette under running water for 30-60 seconds and let it dry.

Note:

If the PVDF membrane is dry after transfer, it must be reactivated in applicable alcohol before proceeding to the subsequent experiments.

1. Product Overview

1.1 Instrument overview

eBlot™ L2 Fast Transfer System is the second-generation protein transfer instrument engineered to efficiently handle the transfer of proteins. eBlot™ L2 can simultaneously complete the transfer process for up to 4 mini gels or 2 midi gels in 5-15 minutes. The unique eBlot technology seamlessly combines the benefits of traditional wet transfer and semidry/dry transfer methods, ensuring with very short transfer times producing exceptional transfer efficiency and consistent results for proteins of all sizes.

eBlot™ L2 system consists of one device and two transfer cassettes, each capable of running independently. The transfer process is fully automated using alcohol-free proprietary reagents, ensuring a clean, safe and convenient transfer process. eBlot™ L2 is compatible with commonly used gels, such as Bis-Tris and Tris-Gly gels, supporting versatile research needs.

Features

- Fast wet transfer in 5-15 minutes
- High throughput transfer for up to 4 mini gels or 2 midi gels
- Alcohol-free reagents with distilled water dilution
- Result consistency and reproducibility
- Easy operation with touchscreen and fast start
- Versatile compatibilities
  - All size proteins
  - Bis-Tris and Tris-Gly gels
  - PVDF, nitrocellulose membranes

1.2 Components, specifications and installation

Components

eBlot™ L2 Fast Wet Transfer System includes the following components. Please carefully check the components before installation.

Products	Catalog Number	Quantity
eBlot™ L2 Fast Transfer Device	L00980	1
eBlot L2 Transfer Cassette, midi	L00982	1
Power cord	-	2
Forceps	-	1
Spatula	-	1
Silver tray	-	1
Roller	-	1
Silicon tubing	-	4
Plastic container	-	1
Plastic container L	-	1
Stylus pen	-	1
eBlot L2 reagent bottle cap	-	3
Liquid Container, 5L	-	2

Specifications

eBlot™ L2 Fast Transfer Device

Catalog Number:	L00980
Weight:	7.5 kg
Dimension:	280 mm (L) ×260 mm(W)×320 mm (H)
Electrical Requirements:	100-240 V, 50/60 Hz, 800 W
Digital Module:	LCD display, alarm and LED light
Application:	Fast transfer of proteins from polyacrylamide gel to PVDF or nitrocellulose membrane
Materials:	ABS, PP, Stainless steel, Plasticized silicone
Operating Temperature:	15-40 ℃
Forceps:	Stainless steel
Spatula:	Polycarbonate
Silver tray:	Stainless steel

Note: Avoid contact with acid, alkaline, acetone or any other reagents that might erode or damage the exterior surface of the device.

eBlot L2 Transfer Cassette, midi

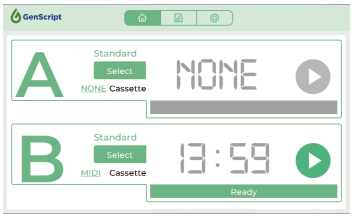
Catalog Number:	L00982
Dimension:	205 mm (L)× 160 mm (W)× 40 mm (H)
Weight:	1.9 kg
Material:	Aluminum-magnesium alloy, titanium, stainless steel
Application:	Each cassette can transfer up to 2 mini gels or 1 midi gel

Note: Avoid contact with acid, alkaline, acetone or any other reagents that might erode or damage the exterior surface of cassettes

Installation

Users must follow the instructions below when installing the instrument

Steps	Descriptions
1	Check if the power cord matches with the outlet
2	Place eBlot™ L2 on a levelled laboratory bench
3	Maintain cleanliness and ventilation around the instrument, especially behind the device
4	Ensure the power switch is off
5	Connect the inlet and outlet tubes to the color-matched reagent containers as followed: · Transparent cap - Transfer Buffer · Yellow cap - ddH2O · Black cap - Waste
6	Connect the power
7	Turn on the power switch. The device will start initial testing automatically
8	The interface will display after the initial testing is completed.



Warning: for moving the instrument after use, refer to instructions in 4. Device Maintenance.

2. Device and Interface Display

2.1 Device and transfer cassette

eBlot™ L2 Fast Transfer System consists of one device and two transfer cassettes

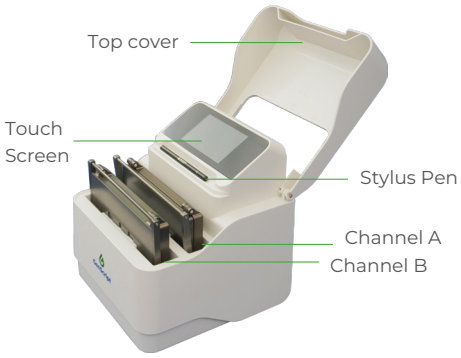
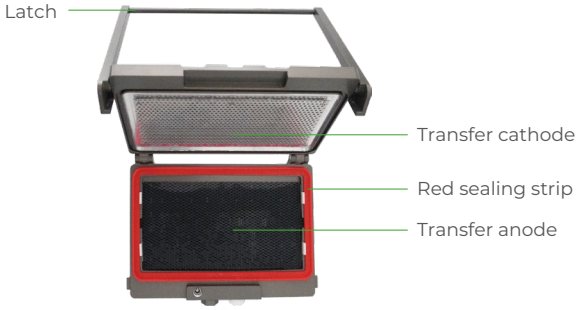


Figure 1. eBlot L2 Device

Figure 2. eBlot L2 Back View

Transfer cassette (Closed)



Transfer cassette (Open)

Figure 3. eBlot L2 Transfer Cassette midi

2.2 Interface Display and Program Setting

2.2.1 Interface Display

eBlot™ L2 has three interfaces: main interface, program setting and system setting. The initial interface after powered on is the main interface which shows Channel A and B, and the selected programs.

Main Interface

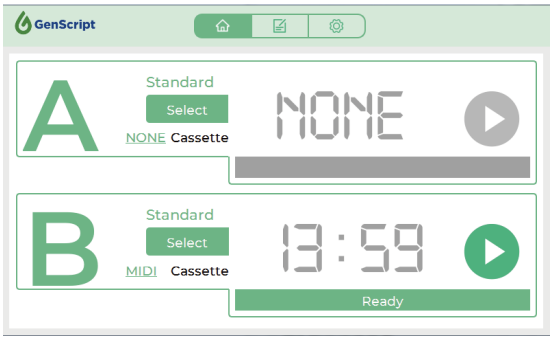


Figure 4. Main Interface

Interface Notation	Description
AB	Channel A, Channel B
SELECT	Transfer program selection
Standard	Selected transfer program
MIDI / NONE	MIDI or NONE Transfer cassette
/	Green indicates the channel is ready for run while gray indicates unavailable
	Transfer in progress or transfer has finished Press and hold it for 5 seconds to terminate the program if needed
Ready	Current channel status
	Interface navigation

Program Selection Interface

Press SELECT to enter the program selection interface.

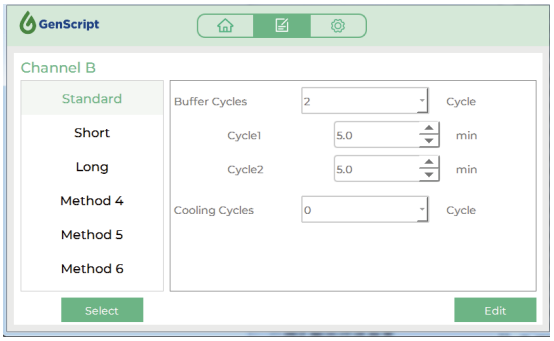
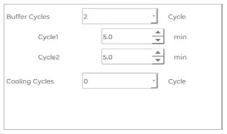


Fig 5. Program selection interface for channel B

Interface notation	Description
	List of program options, with the selected one highlighted
	Program settings
Channel B	Current channel
SELECT	Apply the selected program to the indicated channel and return to main interface
EDIT	Edit the selected program. Program setting cannot be changed during transfer progress

Program Setting Interface

Navigate into  for program setting interface and select the program.

Tap EDIT to edit the program settings.

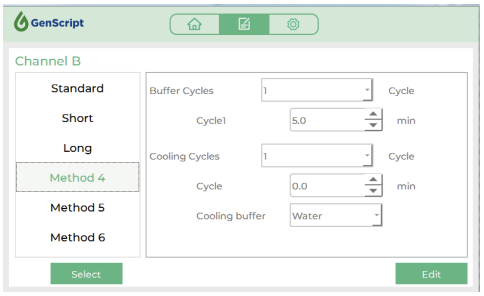


Fig 6. Program Selection

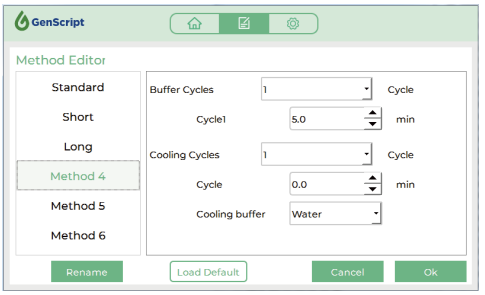


Fig 7. Program Editting

Interface notation	Description
Buffer Cycles 2 Cycle	2 Choose number of transfer cycles
Cycle 1 5.0 min	5.0 Type in transfer time. Suggested <9 minutes for each transfer cycle
Cooling Cycles 0 Cycle	0 Choose number of cooling cycles
Cycle 0.0 min	0.0 Type in cooling time
Cooling buffer Water	Water Select cooling buffer type between transfer buffer and water(Distilled Water), If water is selected, fill the yellow cap container with water and connect it to the yellow outlet
Rename	Rename the selected program
Load Default	Reset to default program setting
Cancel	Exit program editting and do not save the changes
Ok	Save the program edits

System Setting Interface

Navigate into ⚙ for system settings.

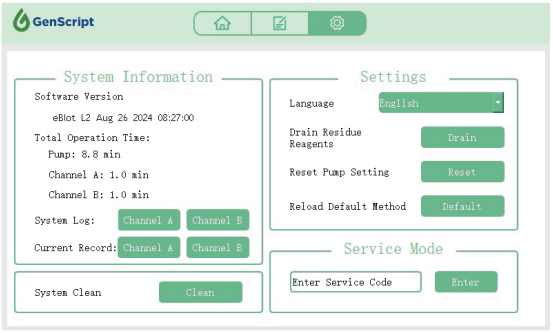


Fig 8. System Setting

Notation	Description
Language English	Select between English/Chinese interface
Drain Residue Reagents Drain	Drain the residue reagents from the instruments tubing
Reset Pump Setting Reset	Reset to the default buffer inflow time
Reload Default Method Default	Reset to the default program settings of Standard, Short, Long protocols
System Clean Clean	Perform system cleaning. Refer to the instructions in Section 4. Device Maintenance
Enter Service Code Enter	Use by engineers only

2.2.2 Transfer Program Overview

eBlot™ L2 contains 3 default programs (Standard, Short, Long), and 3 customizable programs for various transfer needs.

eBlot L2 Default Program Protocols

Standard

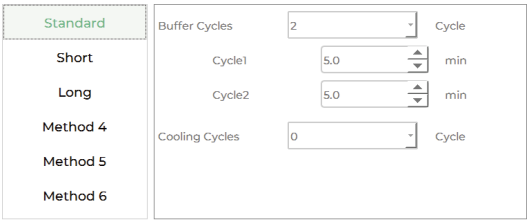


Figure 9. Default Standard Program

Short

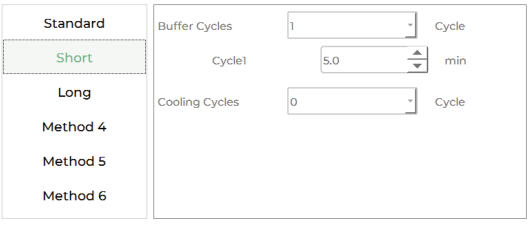


Figure 10. Default Short Program

Long

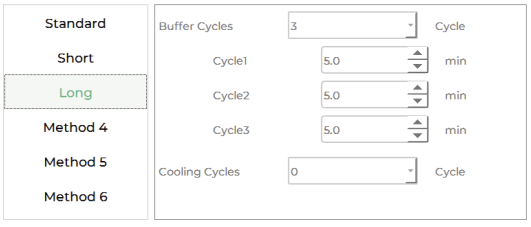


Figure 11. Default Long Program

3. Device Operation and Application Data

Please follow the instructions to obtain consistent and high quality data.

Crystallization may occur in reagents under low temperature. Please leave the reagents at room temperature to allow dissolution before use. Do not use expired or turbid reagents.

- Wear gloves to prevent contamination of gels, membranes and transfer sponges.
- Check the volume in the reagent bottle before each transfer to ensure there is adequate amount of transfer buffer (300 mL/Standard program).
- Use the provided waste container, tubing and caps. Regularly empty the waste container.
- Before transfer, cut off the gel well fingers and equilibrate the gel and membrane in the equilibrium buffer for 1 minute (60 mL/transfer).
- When assembling the transfer sandwich, place the gel and membrane close to the cassette bottom, with the large molecular weight proteins closer to the inlet/outlet.
- Gently remove bubbles between the gel and membrane using the roller dipped in the equilibrium buffer.
- Fully insert the transfer cassette into the channel with both hands until the scale lines of the cassette fully covered.
- After transfer, remove the transfer cassette from the instrument, and immediately place it in a tray containing distilled water to prevent the membrane from drying out.
- After each transfer, rinse the cassette thoroughly under running water to cool down the cassette and to prevent any salt precipitation.

3.1 Reagent Preparation

Before you use the proprietary transfer reagent kit (Cat. No. L01015) on eBlot L2, dilute the concentrated transfer buffer (Cat. No. B0056) and the concentrated equilibrium buffer (Cat. No. B0057) according to the protocol below.

Ingredients for 1X transfer buffer	Volume
eBlot L2 Concentrated Transfer Buffer，5X	1 L
ddH_2O	4 L
Total	5 L
	Mix well before use

Ensure the transfer buffer is adequate before each transfer and do not reuse (300 mL/Standard program).

Ingredients for 1X equilibrium buffer	Volume
eBlot L2 Concentrated Equilibrium Buffer，5X	100 mL
ddH_2O	400 mL
Total	500 mL
	Mix well before use

Do not reuse the equilibrium buffer (60 mL/transfer).

3.2 Program Selection Guide

3.2.1 Turn on the device by pressing the power switch on the back of the device.

3.2.2 The main interface will display Channel A and B, and the current programs.

3.2.3 Select the transfer program for your target protein size.

Refer to 2.2 Interface Display and Program Setting for operation details.

Transfer Program Selection Guide

Default Transfer Program	Protein Size Range
Short	＜ 20 kDa
Standard	20-200 kDa
Long	＞ 200 kDa

Note：

a. 0.22 μm PVDF/NC membranes are recommended for proteins ＜20 kDa.

b. If you are using GenScript SurePAGE Mini or Midi Gel 4-12% or 4-20%，please select Standard program.

c. Users can customize the transfer programs to optimize the transfer efficiency.

- If the gel concentration and the protein size are lower, transfer time and cycles can be reduced.
- If the gel concentration and the protein size are higher, transfer time and cycles can be increased.

Technical Support： cpbu.techsupport@genscript.com

3.3 Operation Instructions

1. Prepare 60 mL 1X equilibrium buffer in the provided plastic container.

2. Prepare 250 mL distilled water in the provided tray.

3. Ensure adequate transfer buffer and regularly empty the waste container.

Note：Each Standard program consumes approximately 300 mL 1X transfer buffer.

4. Place the transfer cassette on the bench and open the cassette as shown in Figure 12.

a. Release the cassette latch by rotating it upward.

b. Lift the latch and fully open the cassette cover to approximately >90°.

C. Note the anode side of the transfer cassette is marked with a red sealing strip.

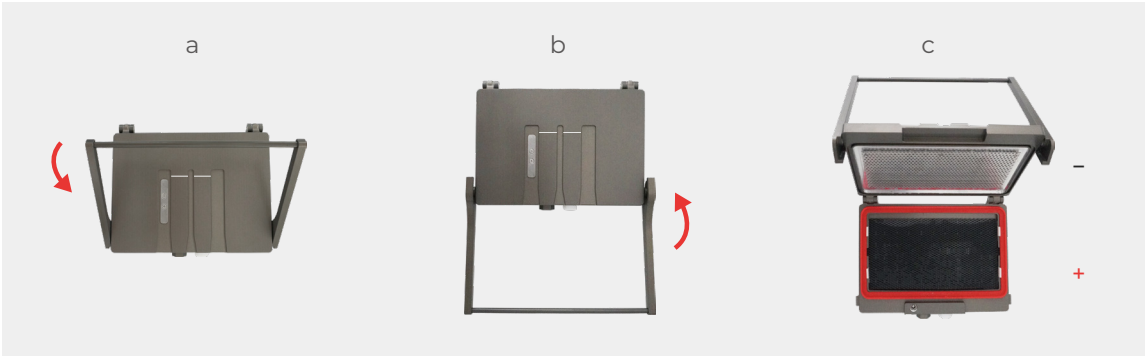


Figure 12. Opening the transfer cassette

5. Cut off the gel well fingers as shown in Figure 13.

Note：

a. Rinse the gel cassette with water to remove any remaining running buffer.

b. Cut off any uneven part of the gel, and the stacking gel of the self-casted gel.

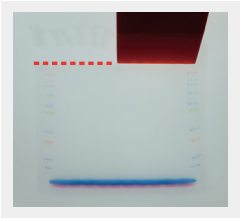


Figure 13. Cut off gel well fingers

6. Place the membrane and gel with wells cut off in the equilibrium buffer for 1 minute*.

Note：Activate the PVDF membrane in applicable alcohol before equilibrium.

*The gel equilibrium time should not exceed 5 minutes to prevent protein dispersion.

7. Place one dry sponge on the red anode side.

Note:

a. The anode side is marked with red sealing strip.

b. Use dry sponges for transfer. Sponges should NOT be wet.

c. Sponges are NOT reusable and should be discarded after the transfer.

Figure 14. Placing transfer sponge

8. Take out the membrane from equilibrium buffer and place on top of the dry sponge, then place the gel on top of the membrane with large proteins towards the inlet/outlet.

Note:

a. Correct size of the components: Sponge ≥ Membrane ≥ Gel.

b. Place gel and membrane towards the bottom, and do not exceed the edge of sponge as shown in Figure 15.

c. Avoid overlapping or contact between two mini gels.

d. Finish the assembly of transfer sandwich quickly to prevent the gel and membrane from drying out.

e. Do not place gel and membrane above the green dotted line.

f. When transfer only 1 mini gel in the midi cassette, place the mini gel in the middle of the same indicated area.

a. Placing 2 mini gels

b. Placing 1 midi gel

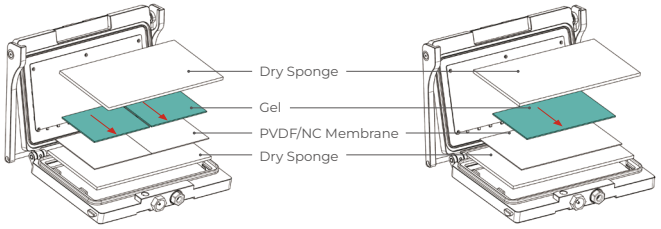
Figure 15. Placing gel and membrane

9. Gently remove bubbles between the gel and membrane using the roller dipped in the equilibrium buffer.

Note：Do not press the gel to cause gel deformation.

10. Place another dry sponge on top of gel.

Note：Do not frequently remove the top dry sponge to create bubbles between gel and membrane.



a. Assembly of 2 mini gels　　b. Assembly of 1 midi gel

Figure 16. Assembly of transfer sandwich

11. Close the transfer cassette as shown in Figure 17.

a. Close the top cover of transfer cassette and press firmly.

b. Rotate the latch upward to lock the cassette.

Figure 17c shows the fully closed transfer cassette

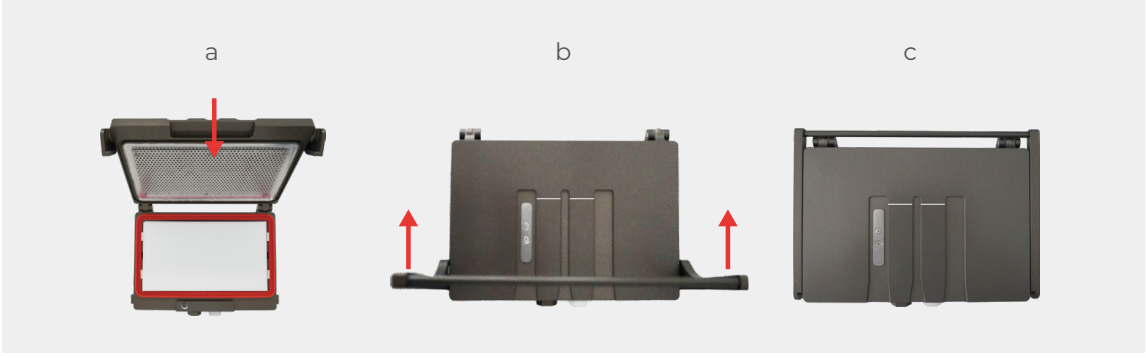


Figure 17. Closing the transfer cassette

12. Fully insert the assembled transfer cassette into the channel until the scale lines of the cassette completely covered as shown in Figure 18.

Note:

a. Note the proper orientation and loading of the cassette. The scale lines of the cassette should be facing towards the user.

b. Start transfer within 5 minutes after the assembly of transfer sandwich.

Figure 18. Inserting the transfer cassette

13. Press ▶ for the corresponding channel to initate the transfer program. The screen will display a countdown timer as shown in Figure 19.

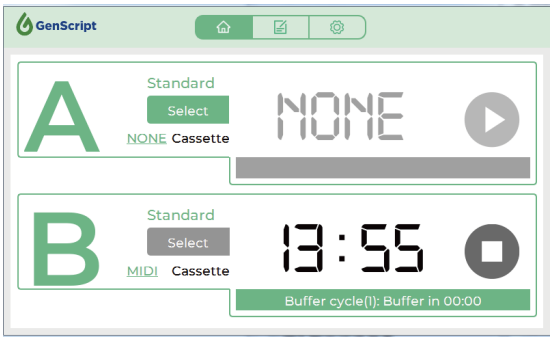


Figure 19. Start the transfer

14. The device will beep when the countdown reaches 00:00 as shown in Figure 20. Press the stop button to return to the initial interface.

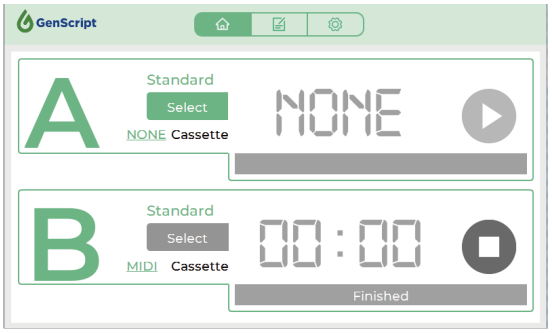


FIgure 20. Transfer completed

15. Remove the transfer cassette from the channel.

Note：Slightly heated transfer cassette is normal.

16. Open the cassette according to Step 4. Immediately place the transfer sandwich into a tray containing distilled water. Disassemble the sandwich and take out the membrane for the next steps.

Note：If PVDF membrane is dry after transfer, it must be reactivated in applicable alcohol for 1 minute before proceeding to the subsequent experiments.

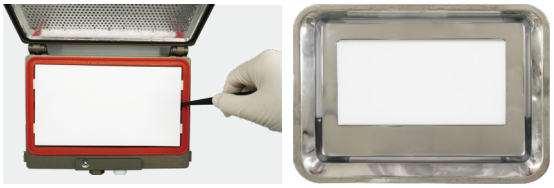
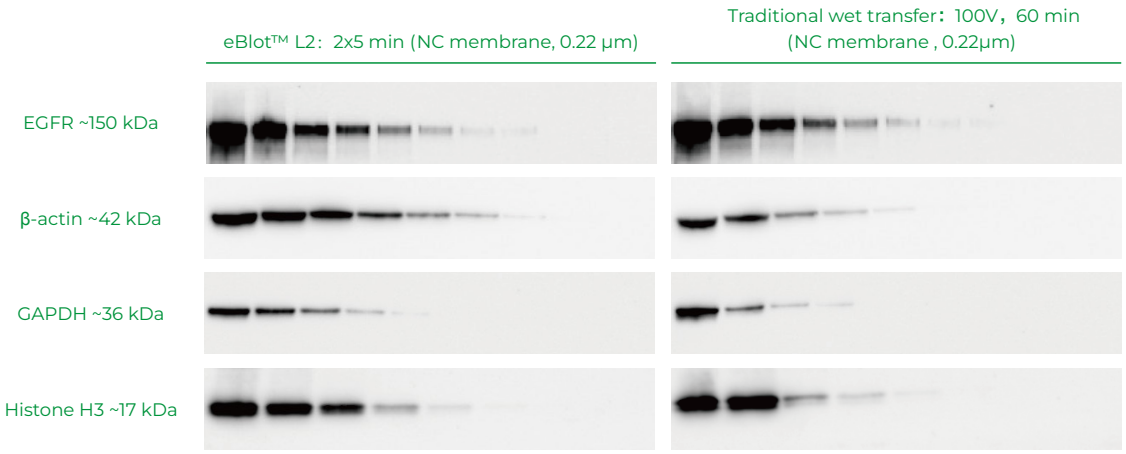


Figure 21. Disassembly of the transfer sandwich

After each transfer, rinse the cassette with running water for 60 seconds and set dry on the bench.

3.4 Application Data

Side-by-side comparison data between eBlot™ L2 Standard Program and traditional wet transfer using GenScript 4-12% Precast Gel.



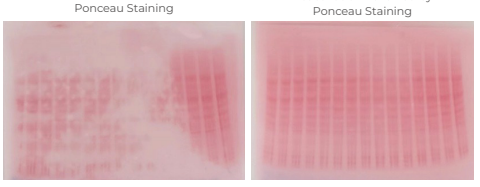
Target protein	Samples	Primary Ab	Secondary Ab
EGFR	HEK293 Cell Lysate, left to right : 20ug, 10ug, 5ug, 2.5ug, 1.25ug, 0.62ug, 0.31ug, 0.15ug	Recombinant Anti-EGFR antibody, mAb, rabbit (Abcam, ab52894), 1:1000	Anti-rabbit IgG (HRP) (GOAT) antibody peroxidase (Rockland, 610-103-122), 1:10000
β-actin	HEK293 Cell Lysate, left to right : 40ug, 20ug, 10ug, 5ug, 2.5ug, 1.25ug, 0.62ug, 0.31ug, 0.15ug	THE™ beta Actin antibody, mAb, mouse (Genscript, A00702), 1:5000	Anti-mouse IgG (HRP) (GOAT) antibody peroxidase (Rockland, 610-103-121), 1:10000
GAPDH	HEK293 Cell Lysate, left to right : 40ug, 20ug, 10ug, 5ug, 2.5ug, 1.25ug, 0.62ug, 0.31ug, 0.15ug	GAPDH antibody, mAb, mouse (GenScript, customized), 1:1000	Anti-mouse IgG (HRP) (GOAT) antibody peroxidase (Rockland, 610-103-121), 1:10000
Histone H3	HEK293 Cell Lysate, left to right : 40ug, 20ug, 10ug, 5ug, 2.5ug, 1.25ug, 0.62ug, 0.31ug, 0.15ug	Histone H3 antibody, pAb, rabbit (GenScript, customized), 1:1000	Anti-rabbit IgG (HRP) (GOAT) antibody peroxidase (Rockland, 610-103-122), 1:10000

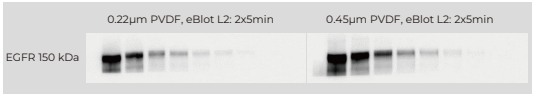
4. Device Maintenance

Regular maintenance is highly recommended to maintain the upkeep of the device and performance of protein transfer.

<table>
<tr><th>Components</th><th>Maintenance guide</th></tr>
<tr><td>Transfer cassette</td><td>After each transfer, rinse the cassette with water for 60 seconds and set dry on the bench.</td></tr>
<tr><td>Transfer channels and Tubing</td><td>Perform system cleaning once every 100 transfers, or once a month for higher usage frequency.
1. Prepare 80 mL cleaning buffer to clean both channels according to the protocol below.
<table><tr><th>Ingredients</th><th>Volume</th></tr><tr><td>Ethanol (>99%)</td><td>24 mL</td></tr><tr><td>Distilled water</td><td>56 mL</td></tr><tr><td>Total</td><td>80 mL</td></tr><tr><td></td><td>Mix well before use</td></tr></table>Note：Excessive volume may result in residual cleaning solution.
2. Insert empty cassettes into both channels. Drain residue reagents from tubing by selecting the "Drain" function on the "Setting" interface.
3. Disconnect only "Waste 2" tubing from the waste container cap and insert it into a container filled with cleaning solution. Keep "Waste 1" on the waste container cap.
4. Connect the yellow tubing to the ddH2O inlet, and insert the other end of the tubing to the container with distilled water.
5. Press System Cleaning button to run the cleaning program for 3 minutes.
6. After cleaning is completed, reconnect the "Waste 2" tubing to the waste container.</td></tr>
<tr><td rowspan="3">Others</td><td>Drain the tubing
Press Drain to flush the tubing.</td></tr>
<tr><td>Device left unused for long-term
If the device will not be used for an extended period (>2 weeks), flush the tubing twice, turn off the device, and seal the transfer solution bottle with a closed cap to prevent liquid evaporation.</td></tr>
<tr><td>Moving the device
When moving the device, please ensure that the main interface is functional when powered on, and no liquid in the channels. Keep the instrument levelled during moving to prevent liquid from spilling out of the channels or tubing.</td></tr>
</table>

5. Troubleshooting

Common Issues	Causes	Resolution
Q1 Strong transfer background or contamination	1. Contamination or bacterial growth in the gel running buffer. 2. Contamination in the PVDF membrane activation reagent (methanol, ethanol, isopropanol). 3. Contamination in the eBlot L2 equilibrium buffer. 4. Contamination due to the reuse of transfer sponges. 5. Residue on the eBlot L2 transfer cassette. 6. Lack of instrument cleaning.	1. Rinse and dry the electrophoresis tank after use; do not reuse gel running buffer. 2. Do not reuse PVDF membrane activation reagent. 3. Do not reuse eBlot L2 equilibrium buffer. 4. Do not reuse transfer sponges. 5. Rinse the transfer cassette for 60 seconds and set dry after each transfer. 6. Refer to Section 4. Device Maintenance to regularly perform system cleaning.
Q2 Irregular bands along the membrane edge	1. Two mini gels are overlapping or in contact. 2. Gel exceeds the edge of the membrane in the transfer sandwich. 3. Gel or membrane exceeds the edge of the transfer surface of the cassette.	1. Avoid overlapping and contact between 2 mini gels. 2. The correct size of transfer sandwich components: Sponge > Membrane > Gel. 3. Place gel and membrane within the indicated area.  Tranfer 2 mini gels in one cassette  Transfer 1 midi gel in one cassette
Q3 Lost bands on PVDF membrane after transfer and Ponceau staining	1. PVDF membrane is not activated before transfer. 2. PVDF membrane is dry and deactivated after transfer.	PVDF membrane needs to be activated in the applicable alcohol before transfer, and reactivated after transfer if the PVDF membrane is dry. Membrane Inactivation Ponceau Staining Reactivation Followed by Ponceau Staining 

Common Issues	Causes	Resolution
Q4 Low signal for large protein bands	1. Inappropriate membrane pore size 2. Transfer time is too short 3. Gel concentration is not appropriate	1. Use 0.45 µm PVDF/NC membrane if signal is low for proteins >150 kDa 2. Increase transfer time or cycles 3. Choose lower concentration gels 
Q5 Low signal for small protein bands	1. Inappropriate membrane pore size 2. Transfer time is too long 3. Protein dispersion 4. Gel concentration is not appropriate	1. Use 0.22 µm PVDF/NC membrane if signal is low for proteins <20 kDa 2. Reduce transfer time or cycles 3. Start transfer immediately after electrophoresis; reduce the gel equilibrium time 4. Choose higher concentration gels 
Q6 Lost bands for target proteins	1. The assembly of transfer sandwich takes too long that causes dryness or deactivation of the membrane 2. Did not start transfer immediately after the assembly of transfer cassette 3. Degradation of target proteins 4. Same as Q3, Q4 or Q5	1. Complete the assembly of transfer cassette quickly; re-equilibrate or reactivate the membrane if needed. 2. Start the transfer within 5 minutes after the assembly of transfer sandwich 3. Prepare new protein samples 4. Same as Q3, Q4 or Q5
Q7  low current warning in Channel A Ok	1. Incorrect transfer buffer dilution: transfer buffer concentration is too low 2. Incorrect assembly of transfer sandwich 3. PVDF membrane is not activated	1. Prepare and dilute the transfer buffer to 1X according to the protocol in 3.1 Reagent Preparation 2. Correctly assemble the transfer sandwich according to 3.3 Operation Instructions 3. Activate PVDF membrane in applicable alcohol before transfer

Common Issues	Causes	Resolution
Q8  high current warning in Channel A Ok	1. The surface temperature of transfer cassette is too high due to repetitive transfers or insufficient rinse between two transfers 2. Incorrect transfer buffer dilution: transfer buffer concentration is not diluted or too high 3. Abnormal substances exist inside the transfer cassette that causes short circuits between anode and cathode 4. Incorrect assembly of transfer sandwich 5. Waste container is too full that causes reverse flow during transfer	1. After each transfer, rinse the transfer cassette in water for 60 seconds and cool it down to room temperature 2. Prepare and dilute the transfer buffer to 1X according to the protocol in 3.1 Reagent Preparation 3. Inspect if there are abnormal substances inside the transfer cassette; contact GenScript Tech Support if not resolved 4. Properly assemble the transfer sandwich 5. Regularly empty the waste container
Q9  not enough buffer in Channel B Ok	1. Insufficient transfer buffer 2. Incorrect connection to the transfer buffer container, or twisted/broken tubing 3. Crystallization of reagent clogs in the tubing 4. Tubing end is not fully submersed in the buffer 5. Tubing is disconnected from the buffer bottle cap 6. Same as Q7	1. Prepare adequate amount of transfer buffer (300ml/standard transfer) before each transfer 2. Check the transfer buffer tubing 3. If the device is left unused for an extended period, empty the tubing to prevent crystallization; if the tubing is clogged, perform system cleaning (4.0 Device Maintenance) 4. Make sure the end of tubing is submerged in the buffer and the tubing connects are intact 5. Check the tubing connection under the bottle cap 6. Same as Q7
Q10  Removal of cassette detected Ok	Channel A transfer cassette is accidentally removed, and program is terminated	The transfer program is automatically terminated. Insert the transfer cassette and restart the program Note: Removing the transfer cassette during the liquid inflow process may result in a small amount of transfer buffer spraying out, triggering a liquid leakage warning

Common Issues	Causes	Resolution
Q11  leakage error	1. The transfer cassette is not fully inserted into the instrument 2. The sealing ring at the connection between the transfer cassette and the instrument is aged, causing liquid leakage 3. Removing the transfer cassette during the liquid inflow process may result in a small amount of transfer buffer spraying out, triggering a liquid leakage warning	Turn off the instrument and disconnect the power. Remove the black soft plug from the bottom of the instrument and elevate the rear of the instrument to allow the liquid inside the instrument to drain out Note: Do not invert the instrument. Troubleshoot according to the causes. If the liquid leakage error persists after restarting the instrument, please contact GenScript Technical Support
Q12  liquid detection error		
Q12  pump error	Hardware malfunction	Please contact GenScript Tech Support
Q12  valve error		
Q12  Integrated driver error		

6. Consumables Offering

eBlot L2 Transfer Reagent Kit

Cat. No.	Product Name	Size	Description
L01015-30	eBlot L2 Transfer Basic Kit, Midi	1 Kit	eBlot L2 concentrated transfer reagents for 30 midi or 60 mini transfers with standard method

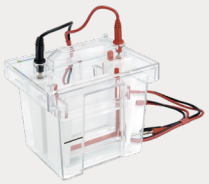
L01015-30, eBlot L2 Transfer Basic Kit, Midi

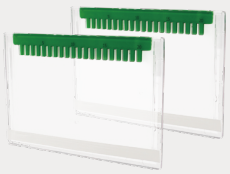
Component name	Size	Quantity
eBlot L2 Concentrated Transfer Buffer，5X	1.8 L	1
eBlot L2 Equilibration Buffer (5X)	0.4 L	1
eBlot L2 Transfer Sponge, Midi	15 pk	2

7. Related Products

SurePAGE™
Mini&Midi Bis-Tris Precast Gel

High Resolution and Fast Run Time





eBlot™ Fast Wet Transfer System

All size protein transfer
in 5-15 minutes

eStain™ Fast Staining System

Gel or membrane staining
in 10 minutes

eZwest™ Automated Western Device

Automated antibody incubation and washing

Saving more time with eZwest Diluent Kit

SurePAGE™ Bis-Tris Gel, Midi, 10pk/box

Cat. No.	Concentration	Well format
M00995	4-12%	20
M00996	4-12%	26

SurePAGE™ Bis-Tris Gel, Mini, 10pk/box

Cat. No.	Concentration	Well format
M00652	4-12%	10
M00653	4-12%	12
M00654	4-12%	15
M00655	4-20%	10
M00656	4-20%	12
M00657	4-20%	15
M00658	8-16%	10
M00659	8-16%	12
M00660	8-16%	15
M00661	8%	10
M00662	8%	12
M00663	8%	15
M00664	10%	10
M00665	10%	12
M00666	10%	15
M00667	12%	10
M00668	12%	12
M00669	12%	15

Other Electrophoresis Products

Cat. No.	Product Name	Quantity
L01001	GenBox Midi Electrophoresis Tank	1
L01021	GenBox Mini Plus Electrophoresis Tank	1
L01022	GenBox Midi/Mini Electrophoresis Tank	1
L00780	GenBox Mini Electrophoresis tank	1
L00781	GenBox Mini Blot module	1
L00782	GenBox Mini Blot System	1
M00138	Tris-MOPS-SDS Running Buffer Powder	5 PK/Box
M00677	MES SDS Running Buffer Powder	5 PK/Box
M00624	Broad Multi Color Pre-Stained Protein Standard	250 µl, 1250 µl
M00516	PAGE-MASTER Protein Standard (for SDS-PAGE)	500 µl
M00521	WB-MASTER Protein Standard	250 µl
M00676	4X LDS Sample Buffer	10 ml, 250 ml
MB01015	5X Sample Buffer	5 ml
M00139	Transfer Buffer Powder	10 PK/Box

Western Blotting Products

Cat. No.	Product Name	Quantity
L00657	eStain™ L1	1
L00753	eStain L1C Protein Staining Kit	1
L00816	eZwest™ Lite Automated Western Device	1
L00818	eZwest Diluent Kit	1
A00702	THE™ beta Actin Antibody, mAb, Mouse	100 µg

8. Warranty

GenScript warrants that eBlot™ L2 to be free from defects in materials and workmanship under normal use and service for a period of twelve (12) months from the date of installation by GenScript or its authorized distributor.
GenScript agrees within the warranty period, at its discretion, to repair defects in the material or workmanship or to furnish a repaired or refurbished product of equal value in exchange without a fee. Such repairs require verification of the defect or malfunction and proof of purchase as confirmed by showing the serial number with the original dated sales receipt.

Warranty Limitations:

The warranty excludes failure resulting from the following situations:

- Instrument failure caused by improper handling or improper human operation
- Repairs or modifications by any party other than GenScript or an authorized agent
- Use of accessories or other spare parts supplied by any party other than GenScript
- Damage caused by natural disasters (e.g. earthquakes, landslides, hurricanes, tornadoes, etc.)
- Damage caused by the use of improper reagents (except for chemicals recommended by the instrument manufacturer)

For consulting or repair services, please contact Genscript customer service after confirming the instrument model, instrument serial number, order number, purchase date and other relevant information.

Tel: 400-025-8686 ext. 5810/5256/5103

Email: product@genscript.com

- Instrument model: _____
- Instrument serial number: _____
- Order number: _____
- Date of purchase: _____

USA

Tel: +1-732-885-9188
Toll-Free: +1-877-436-7274
Fax: +1-732-210-0262
Email: support.US@genscript.com
Address: 860 Centennial Ave. Piscataway NJ 08854

China

Tel: +86-025-58897288 ext 5810
Fax: +86-025-58897288-5815
Email: product@genscript.com.cn
Address: 28 YongXi Road, JiangNing District, Nanjing, China

Asia/Pacific

Tel: +65 3159 1898
Email: sales.AP@genscript.com
Fax: +65 6491 5073
Address: 164 Kallang Way, #06-12, Singapore 349248

Europe

Tel: +31 (0) 71 569 0120
Email: support.EU@genscript.com
Address: Treubstraat 1, 2288Eg Rijswijk Zh Netherlands

20240930