SWIFT™ Western Transfer Pads

G-Biosciences

Abstract

SWIFT™ Western Transfer Pads For Efficient High & Low MW Protein Transfer

(Cat. # 786-370 to 786-375, 786-370S, 786-373S)

Citation: G-Biosciences SWIFT™ Western Transfer Pads. **protocols.io**
dx.doi.org/10.17504/protocols.io.e46bgze
Published: 12 Jul 2016

Guidelines

INTRODUCTION

Western blot analysis of proteins is a routine and commonly used technique in most research laboratories, with 3 major drawbacks. The first is the variable efficiency of the transfer; the second is the problem of transferring high molecular weight proteins; and the third is the amount of time taken to transfer the proteins to a binding membrane. Other minor drawbacks also exist with the Western blotting technique and these include overheating of the apparatus, shorting out of power packs due to excess current and the messy assembling of transfer sandwiches.

SWIFT™ Western Transfer pads alleviate the above issues encountered with Western blotting and produces consistent and efficient transfer of high and low molecular weight proteins, while reducing the transfer time by approximately 50%. The SWIFT™ Western Transfer pads Cat. # 786-370prevent overheating and power shortages by maintaining the lower current in the transfer buffer , without affecting transfer efficiency.

ITEM(S) SUPPLIED

Pad/ Membrane Size 8.5 x 7.5cm	**Cat. # 786-370**	**Cat. # 786-371**	**Cat. # 786-372**	**Cat. # 786-370S**
SWIFT™ Western Buffer	2 x 250ml	2 x 250ml	2 x 250ml	1 x 100ml

SWIFT™ Western Transfer Pads	2 x 10	2 x 10	2 x 10	4
SWIFT™ Template Card	1	1	1	1
PVDF Membrane	N/A	N/A	10	N/A
Nitrocellulose Membrane	N/A	10	N/A	N/A
Pad/ Membrane Size 9.5 x 15cm	**Cat. # 786-373**	**Cat. # 786-374**	**Cat. # 786-375**	**Cat. # 786-373S**
SWIFT™ Western Buffer	2 x 250ml	2 x 250ml	2 x 250ml	1 x 100ml
SWIFT™ Western Transfer Pads	10	10	10	4
SWIFT™ Template Card	1	1	1	1
PVDF Membrane	N/A	N/A	5	N/A
Nitrocellulose Membrane	N/A	5	N/A	N/A

IMPORTANT INFORMATION

Keep the SWIFT™ Western Transfer Pads bag sealed after use to avoid drying of the pads. If pads dry out, add diluted SWIFT™ Western Buffer to wet before use.

STORAGE CONDITIONS

The kit is shipped at ambient temperature. Upon arrival, store at room temp and is stable for 1year.

PREPARATION BEFORE USE

Combine 50ml of supplied SWIFT™ Western Buffer with 850ml deionized water and 100ml Methanol to give 1L final volume. For best results, we recommend to chill the diluted SWIFT™ Western Buffer at 4° C before use.

NOTE: The buffer volume preparation can be adjusted as per blotting unit size.

Before start

Combine 50ml of supplied SWIFT™ Western Buffer with 850ml deionized water and 100ml Methanol to give 1L final volume. For best results, we recommend to chill the diluted SWIFT™ Western Buffer at 4° C before use.

NOTE: The buffer volume preparation can be adjusted as per blotting unit size.

Materials

SWIFT™ Transfer Pads 786-370 by G-Biosciences

Protocol

Step 1.

Soak the PVDF membrane in 100% methanol for 1-2 minutes then rinse 2-3 times with deionized water

DURATION
00:01:00

NOTES
Colin Heath 21 Jun 2016

NOTE: Do not soak nitrocellulose membranes in methanol.

Step 2.

Equilibrate PVDF or nitrocellulose membrane in diluted SWIFT™ Western Buffer for 5-10 minutes

DURATION
00:05:00

Step 3.

Place the supplied SWIFT™ Template Card on a flat surface and place a SWIFT™ Western Transfer Pad on the Template Card.

Step 4.

Add diluted SWIFT™ Western Buffer on top of the pad to soak it further. Use 2ml each for the 8.5 x 7.5cm and 5ml each for the 15 x 9.5cm size pads.

Step 5.

Carefully place the gel on top of the SWIFT™ Western Transfer Pad and ensure no air bubbles are formed.

Step 6.

Incubate for 5 minutes at room temperature. The incubation step improves protein transfer efficiency.

DURATION
00:05:00

NOTES
Colin Heath 14 Jun 2016

NOTE: Do not incubate longer than 5 minutes. Increased incubations do NOT result in increased efficiency.

Step 7.

Place the blotting membrane equilibrated in diluted SWIFT™ Western Buffer on top of the gel, avoiding air bubbles.

Step 8.

Place another piece of SWIFT™ Western Transfer Pad on top of the membrane, avoiding air bubbles. Remove any air bubbles by rolling a tube or pipette over the top of the sandwich.

Step 9.

Slide the blot sandwich onto a transfer cassette, including fiber pads soaked in diluted SWIFT™ Western Buffer.

Step 10.

Put the assembled transfer cassette in a Western transfer module with diluted SWIFT™ Western Buffer and run it for 30-60 minutes at 200mA fixed current.

DURATION
00:30:00