Swift™ Membrane Stain

G-Biosciences

Abstract

Rapid, Sensitive and Reversible Protein Stain For PVDF and Nitrocellulose Membranes.

(These instructions are for a single 8 x 8 cm membrane. Increase the reagent volumes with larger membranes.)

Citation: G-Biosciences Swift™ Membrane Stain. **protocols.io**
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Guidelines

INTRODUCTION

Swift™ Membrane Stain is a unique, proprietary (patents pending), reversible, ready-to- use membrane stain for proteins on nitrocellulose or PVDF membranes. Swift™ Membrane Stain stains proteins faster and with 500X more sensitivity than the routinely used Ponceau-S stain and other commercially available stains. The lower detection limit of Swift™ Membrane Stain is ~0.5ng protein (BSA)/band.

Swift™ Membrane Stain only stains proteins resulting in a clear background and no requirement for additional steps to remove background. The stronger staining allows for easier image capture due to the strong blue stain on a clear, white background.

Swift Membrane Stain™ can be complete removed from the membrane in <1 minute without affecting the biological or immunological properties of the immobilized proteins. This offers an advantage over Coomassie based stains as these are irreversible and can interfere with Western blotting.

*These instructions are for a single 8 x 8 cm membrane. Increase the reagent volumes with larger membranes.

ITEM SUPPLIED

Cat. #	786-677	786-677S
Swift™ Membrane Stain	250ml	25ml
Swift™ Destain [5X]	200ml	20ml

The kit components are sufficient for 20 blots (786-677) or 2 blots (786-677S) of 8 x 8cm size.

STORAGE & STABILITY
The kit is shipped at ambient temperature. Upon arrival, store reagents at room temperature, storing reagents at 4°C will severely affect the performance of the stain. The kit components are stable for 12 months, when stored and handled properly.

ITEMS NEEDED BUT NOT SUPPLIED
• Staining trays (slightly larger than membrane)
• Orbital shaker

PREPARATION BEFORE USE
1. ***1X Swift™ Destain:*** Add 10ml Swift™ Destain [5X] to 40ml deionized water for each blot and store at room temperature until required.

BACKGROUND STAINING

Background staining depends on the types of membrane used for protein transfer. Nitrocellulose gives the clearest and most brilliant white background. Some PVDF membranes may give higher background. Background staining can be removed by shaking the membrane 5-10 minutes in cold water.

Materials

Swift Membrane Stain™ 786-677 by G-Biosciences

Protocol

Step 1.

Following protein transfer to a membrane, place the membrane in a suitable tray.

a. ***For PVDF Membranes:*** Add 20ml 100% methanol and rinse for 10-30 seconds. Discard the

methanol and immediately add 12ml Swift™ Membrane Stain.

b. ***For Nitrocellulose Membranes:*** Add 20ml deionized water and rinse for 30 seconds. Discard the wash and add 12ml Swift™ Membrane Stain.

NOTES
Colin Heath 08 Jun 2016

NOTE: Ensure a suitable tray is used so the membrane is covered by the stain.

Step 2.

Place the trays on a rocking shaker. Protein bands appear in 30 seconds.

DURATION
00:00:30

NOTES
Colin Heath 08 Jun 2016

Note: PVDF membranes need vigorous shaking to ensure they are covered in stain. At the beginning of staining they float on the stain.

Step 3.

Rinse the membrane in DI water to remove the staining solution for improved image capture by scanning or photography.

NOTES
Colin Heath 08 Jun 2016

The membranes can also be allowed to dry to generate a permanent record.

Step 4.

For rapid de-staining of the membranes, rinse the membrane in DI water to remove staining solution.

Step 5.

Wash the membranes for 30-60 seconds in 50ml 1X Swift™ Destain, or until the stain has been removed.

DURATION
00:00:30

Step 6.

Once de-stained, rinse in DI water and store the blot in DI water until required.