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A Geno Technology, Inc. (USA) brand name

# Ponceau-S Stain

(Cat. # 786-575, 786-576)



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## INTRODUCTION

Ponceau S is a rapid and reversible stain for detecting protein bands on Western blot membranes and can be used with PVDF, nitrocellulose and cellulose acetate membranes\*. Ponceau S is a negative stain, which binds to the positively charged amino groups of the protein and it also binds non-covalently to non-polar regions in the protein. Microgram quantities of transferred protein can be detected with Ponceau-S Stain, which generates reddish pink protein bands with a clear background. Since, Ponceau-S staining is reversible, it allows further immunological detection. The limit of detection for this stain is 100ng BSA/band transferred to nitrocellulose membranes (Aebersold, R. et al (1987) Proc. Natl. Acad. Sci. USA, 84:6970).

This stain does not produce a deleterious effect on the sequencing of blotted polypeptides and is therefore one method of choice for locating polypeptides on Western blots for blot-sequencing.

**NOTE:** *\*This stain is not suitable for Nylon membranes, since it binds strongly to the membrane because the nylon is positively charged and the stain is negatively charged, therefore the stain is electrostatically held and does not destain.*

## FREE SAMPLE

G-Biosciences is happy to supply you with a free sample of our Swift™ Membrane Stain. An improved replacement for Ponceau-S, both in sensitivity and quality of staining.

## ITEM(S) SUPPLIED

Cat. #	Description	Size
786-575	Ponceau S Stain	250ml Suitable for 50 Mini blot (8.5cm x 7.5cm)
786-576	Ponceau S Stain	500ml Suitable for 100 Mini (8.5cm x 7.5cm)
Free Sample	Swift™ Membrane Stain	25ml
Free Sample	Swift™ Destain [5X]	20ml

## STORAGE

Shipped at ambient temperature, store at room temperature upon arrival.

## PROTOCOL

1. Following Western blotting, transfer the membrane to 5ml Ponceau S Stain solution
2. Place on an orbital shaker for 5 minutes at room temperature.
3. Rinse membrane with DI water to achieve desired staining, approximately 2-3 washes of 5 minutes each will remove the background staining.
4. For total protein destaining, use a 0.1N NaOH solution. Wash the membrane with 0.1N NaOH solution for 5 minutes. Discard wash solution and repeat once.  
**NOTE:** Do not use alcohols or acetic acid for destaining.
5. Wash the membrane 2-3 times with DI water for 5 minutes each.
6. Continue with Western blot/ immunoblot procedure.

# Swift™ Membrane Stain

## Rapid, Sensitive and Reversible Protein Stain

(Cat. # 786-677, 786-677S)

### 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 completely 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.

### ITEM(S) 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.

### ADDITIONAL ITEMS REQUIRED

- 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.

## PROTOCOL

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

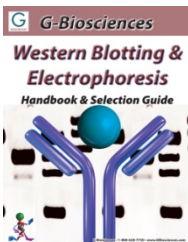
- Following protein transfer to a membrane, place the membrane in a suitable tray
  - For PVDF Membranes:** Add 20ml 100% methanol and rinse for 10-30 seconds. Discard the methanol and immediately add 12ml Swift™ Membrane Stain. *Note: Ensure a suitable sized tray is used to ensure the membrane is covered by the stain.*
  - For Nitrocellulose Membranes:** Add 20ml deionized water and rinse for 30 seconds. Discard the wash and add 12ml Swift™ Membrane Stain. **NOTE:** Ensure a suitable tray is used so the membrane is covered by the stain.
- Place the trays on a rocking shaker. Protein bands appear in ~30 seconds. *Note: PVDF membranes need vigorous shaking to ensure they are covered in stain. At the beginning of staining they float on the stain.*
- Rinse the membrane in DI water to remove the staining solution for improved image capture by scanning or photography. The membranes can also be allowed to dry to generate a permanent record.
- For rapid de-staining of the membranes, rinse the membrane in DI water to remove staining solution.
- Wash the membranes for 30-60 seconds in 50ml 1X Swift™ Destain, or until the stain has been removed.
- Once de-stained, rinse in DI water and store the blot in DI water 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.

## RELATED PRODUCTS

Download our Western Blotting Handbook.



<http://info.gbiosciences.com/complete-western-blot-handbook--selection-guide/>

For other related products, visit our website at [www.GBiosciences.com](http://www.GBiosciences.com) or contact us.

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