

# SYPRO® Protein Gel Stains

Fast, Sensitive, Easy-to-use Protein Gel Stains

SYPRO® Protein Gel Stains are simple, sensitive alternatives to Coomassie™ Brilliant Blue Stain and Silver Stain for a diverse range of applications from 2D gel staining to staining gels prior to Western blotting.

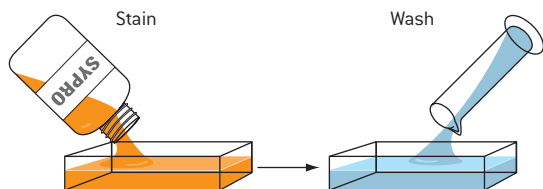
## ■ Benefits

- **Exquisitely sensitive** – Detection limits rival the best silver stains
- **Fast and easy** – Simple procedures require no complex fixation or destain
- **Quantitative** – Broad linear range over 3 orders of magnitude
- **Versatile** – Visualize with UV transilluminators, Dark Reader® transilluminators, and laser scanners
- **Compatible** – With downstream processing such as mass spectrometry and microsequencing

## Select the Best Stain for Your Application

Application	SYPRO® Ruby	SYPRO® Tangerine	SYPRO® Red
High performance staining	■		■
Staining prior to Western blotting		■	
2D Electrophoresis	■		
Edman microsequencing	■	■	■
Mass spectrometry	■	■	■
Quantitation	■	■	■
Zymography	■	■	■
Electroelution	■	■	■
Membrane staining	■		
Protein expression	■		
Detection prior to Immunostaining	■	■	
Difficult to stain proteins	■		
IEF Gels	■		

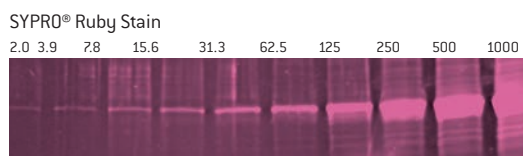
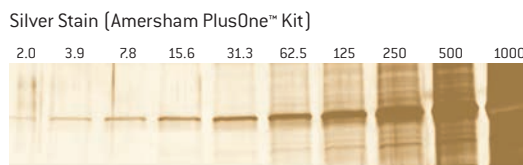
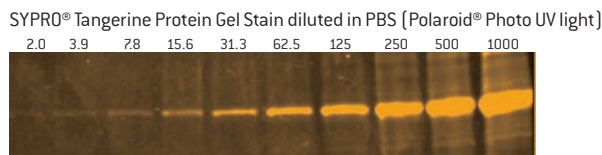
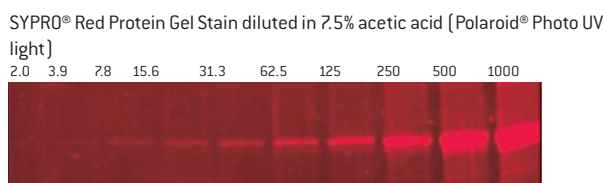
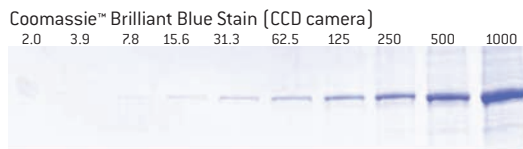
## Fast, Simple Staining Procedure



Fixation is required for staining 2D gels in SYPRO® Ruby Gel Stain. No wash step is necessary for SYPRO® Red or Tangerine Gel Stains.

## Sensitivity of SYPRO® Stains Compared to Coomassie™ Brilliant Blue and Silver Stain

Serial dilutions of ProSieve™ Protein Marker 50 kDa band on 12% PAGEr™ Gold Precast Gels, stained and photographed as noted. Protein levels indicated in nanograms.



## SYPRO® Ruby Protein Gel Stain

The Best Stain for 2D Gel Analysis

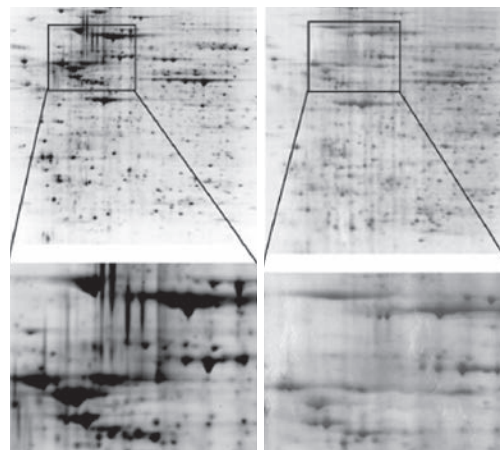
SYPRO® Ruby Protein Gel Stain is a highly sensitive, simple to use fluorescent protein gel stain that can accurately quantitate protein expression levels and is compatible with standard fluorescent visualization systems and downstream identification techniques, such as mass spectrometry.

### ■ Benefits

- **Highly sensitive** – Rivals the best silver stain
- **Quantitative** – Broad linear range and consistent gel-to-gel staining
- **Fast** – Simple staining procedure saves time and money
- **High-throughput** – Fast, easy staining of multiple gels
- **Versatile** – Detects difficult to stain proteins

 18°C to 26°C

### SYPRO® Ruby vs. Silver Stain for 2D Analysis



Proteins from a cell lysate were run on a 2D gel and stained with SYPRO® Ruby Gel Stain (left) or silver stain (right)

### Ordering Information – SYPRO® Ruby Protein Gel Stain

Cat. No. NA	Cat. No. EU	Product Name	Product Description	Size
50564	50564	SYPRO® Ruby Protein Gel Stain		200 mL
50562	50562	SYPRO® Ruby Protein Gel Stain	Ready-to-use, single reagent format, stains approximately 20 minigels or 2 large 2D gels.	1 L

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## SYPRO® Red Protein Gel Stain

The Fastest, Easiest Stain for Detecting Proteins

SYPRO® Red Protein Gel Stain is a fast, highly sensitive fluorescent protein gel stain that detects as little as 4 ng–8 ng protein per band.

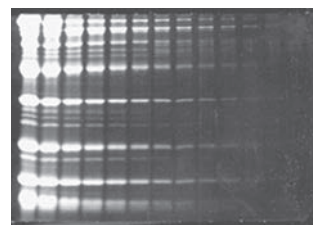
### ■ Benefits

- **Fast** – Complete staining in less than 1 hour
- **Sensitive** – Five times more sensitive than Coomassie™ Brilliant Blue Stain
- **Simple** – No fixation or destaining required
- **Consistent** – Low protein-to-protein variability

Staining is easy – simply soak gels in a solution of 1X SYPRO® Red Stain in 7.5% acetic acid for 40 to 60 minutes. The stain is compatible with UV transilluminators, CCD cameras or laser scanners.

Photographic filters recommended. See page 350.

### SYPRO® Red Gel Stain



SDS Polyacrylamide gel stained with SYPRO® Red Gel Stain

 18°C to 26°C

### Ordering Information – SYPRO® Red Protein Gel Stain

Cat. No. NA	Cat. No. EU	Product Name	Product Description	Size
50542	50542	SYPRO® Red Protein Gel Stain	10 × 50 µL as a 5,000X concentrate, sufficient for staining approximately 50 minigels	10 × 50 µL
50543	50543	SYPRO® Red Protein Gel Stain	500 µL as a 5,000X concentrate, sufficient for staining approximately 50 minigels	500 µL

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## SYPRO® Tangerine Protein Gel Stain

Ideal for Staining Gels Prior to Western Blotting

SYPRO® Tangerine Protein Gel Stain is a versatile, sensitive stain that can be used to visualize proteins prior to Western blotting.

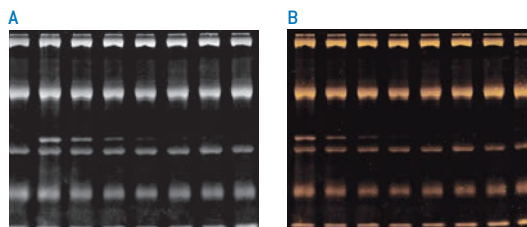
### ■ Benefits

- **Visualize proteins prior to transfer** – Does not interfere with protein activity or transfer
- **Safe** – No acids or organic solvents necessary
- **Sensitive** – Detects as little as 4 ng–8 ng protein per band

The staining procedure is fast and simple and does not require the use of organic solvents; staining can be performed in saline or PBS solutions. Proteins can be used in zymography assays or analyzed by mass spectrometry.

 18°C to 26°C

### Performance of SYPRO® Tangerine Gel Stain



Two identical SDS-PAGE gels were run with samples of protein molecular weight standards (leftmost lanes) and protein molecular weight standards mixed with decreasing amounts of *E. coli* β-glucuronidase and rabbit liver esterase. Gels were stained for total protein with SYPRO® Tangerine Protein Gel Stain, and for specific enzymatic activities. Both gels were first stained with SYPRO® Tangerine Protein Gel Stain (one gel shown, Panel A). One gel was stained with ELF®-97 β-d-glucuronidase substrate [E-6587] for the detection of β-glucuronidase activity (Panel B).

### Ordering Information – SYPRO® Tangerine Protein Gel Stain

Cat. No. NA	Cat. No. EU	Product Name	Product Description	Size
50556	50556	SYPRO® Tangerine Protein Gel Stain	Supplied as a 5,000X concentrated solution in DMSO, sufficient for staining 50 minigels	500 µL

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## SYPRO® Ruby Protein Blot Stain

Fast, Simple, Sensitive Stain for Detecting Proteins on Blots

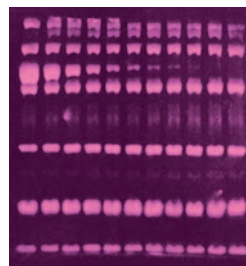
SYPRO® Ruby Protein Blot Stain offers sensitivity levels that rival colloidal stains. The stain is 60-times more sensitive than reversible stains like Ponceau S, and 30-times more sensitive than Amido Black or Coomassie™ Brilliant Blue Stains.

### ■ Benefits

- **Highly Sensitive** – Detects as little as 2 ng–8 ng protein per band
- **Fast** – Simple staining procedure takes less than 1 hour
- **Compatible** – With fluorogenic, chemiluminescent and colorimetric detection techniques

 18°C to 26°C

### Total Protein Detection with SYPRO® Ruby Protein Blot Stain



Molecular weight standards containing decreasing amounts of α-tubulin were run on an SDS-PAGE gel, blotted onto a PVDF membrane and stained with SYPRO® Ruby Protein Blot Stain.

### Ordering Information – SYPRO® Ruby Protein Blot Stain

Cat. No. NA	Cat. No. EU	Product Name	Product Description	Size
50565	50565	SYPRO® Ruby Protein Blot Stain		200 mL

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## SYPRO® Protein Gel Stain Photographic Filter

For Optimal Detection Sensitivity with Black and White Film Photography

The SYPRO® Protein Gel Stain Photographic Filter is suitable for Polaroid® Camera Systems. The filter does not work with CCD camera systems. Check with the manufacturer for the appropriate filter. Recommended for use with all SYPRO® Protein Gel Stains.

### Ordering Information – SYPRO® Protein Gel Stain Photographic Filter

Cat. No. NA	Cat. No. EU	Product Name	Product Description	Size
50540	50540	SYPRO® Protein Gel Stain Photographic Filter	Wratten® #9 Gelatin Filter	3 inch square