

## Photographic Filters for Fluorescent Dye–Stained Gels and Blots

- S6656** SYPRO® photographic filter  
**S7569** SYBR® photographic filter  
**D24771** DyeChrome™ Red/Green Photographic Filter Set \*two filters\*  
**A24772** Amplex® Gold photographic filter  
**S37100** SYBR® Safe photographic filter

### Quick Facts

#### Storage upon receipt:

- 2–25°C
- Do not freeze

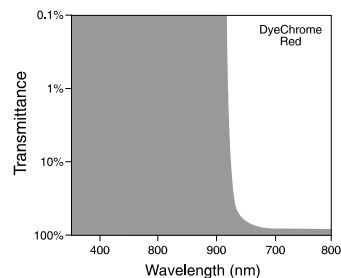
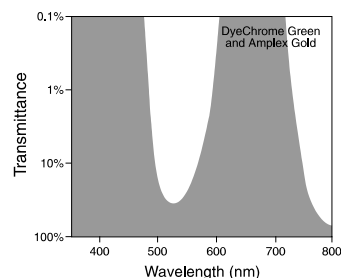
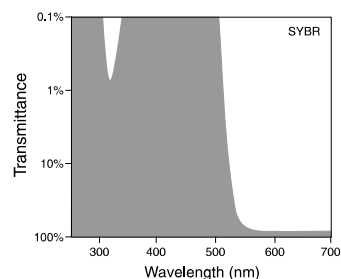
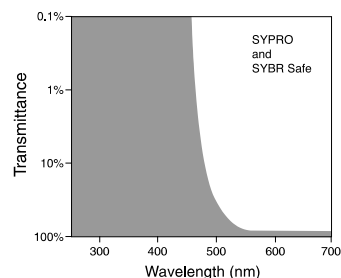
**Notes:** 75 mm × 75 mm gelatin filters for Polaroid® black-and-white photography

### Introduction

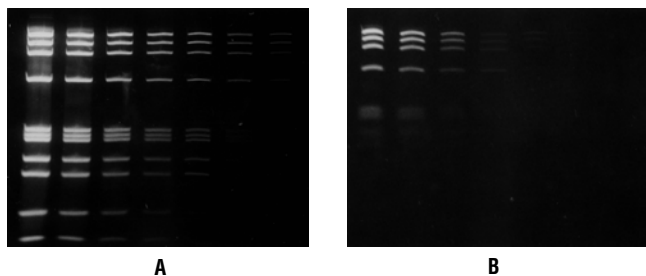
Molecular Probes offers a number of fluorescent reagents for staining nucleic acids and proteins in gels or on blots. To photograph such gels and blots with optimal sensitivity, it is essential to select a photographic filter with spectral properties closely matched to those of the fluorescent dye used. For photographing gels and blots with a Polaroid® camera and Polaroid 667 black-and-white print film, Molecular Probes sells several filters optimized for use with our fluorescent reagents. These filters make it possible to obtain high sensitivity without the need for investing in expensive imaging devices. The transmission spectra of our filters are shown in Figure 1. Please note that these gelatin filters are generally not suitable for use with portable or stationary gel-documentation systems or with CCD cameras. Contact the instrument manufacturer for filter recommendations for these instruments.

The **SYBR® photographic filter** (S7569) should be used to photograph gels stained with SYBR® Green I, SYBR® Green II or SYBR® Gold nucleic acid gel stains. Figure 2 shows the increased sensitivity obtained using the SYBR® photographic filter versus a standard ethidium bromide filter. This filter can also be used to photograph blots stained with the SYBR® DX DNA blot stain.

The **SYPRO® photographic filter** (S6656) can be used to photograph gels or blots stained with any of our SYPRO® protein stains: SYPRO® Orange, SYPRO® Red, SYPRO® Ruby or SYPRO® Tangerine protein gel stains, or SYPRO® Rose Plus or SYPRO® Ruby protein blot stains. This filter also provides the ideal photographic filter for Pro-Q® Diamond phosphoprotein gel and blot stains, for Coomassie Fluor™ Orange protein gel stain or for DDAO, the red-fluorescent product produced in our Pro-Q® Western Blot Kits and Pro-Q® Glycoprotein Detection Kits with lectins.



**Figure 1.** Transmission spectra for Molecular Probes' photographic filters. The dark areas indicate wavelengths that are blocked by the filter; the light areas indicate wavelengths that pass through the filter.



**Figure 2.** A gel containing DNA molecular weight markers was stained with SYBR® Green I nucleic acid gel stain according to the standard protocol and visualized with 254 nm epi-illumination. The gel was photographed through A) the SYBR® photographic filter or B) an ethidium bromide photographic filter using Polaroid 667 black-and-white print film.

The **SYBR® Safe photographic filter** (S37100) is ideal for black-and-white photography of gels stained with Molecular Probes' SYBR® Safe DNA gel stain. Note that the SYBR® Safe photographic filter is identical to the SYPRO® photographic filter (S6656).

The use of photographic filters to document fluorescent staining patterns not only maximizes sensitivity, but also provides an opportunity to separate multiple fluorescent signals on the same gel or blot. Our **DyeChrome™ Red/Green Photographic Filter Set** (D24771) is optimized for nearly flawless separation of

the red and green fluorescent signals generated in the application of the DyeChrome™ Western Blot Stain Kits, while maintaining excellent sensitivity. This set of two filters works equally well for separating DDAO and BODIPY® FL-X signals (DyeChrome™ Western Blot Stain Kits #1–3) or ELF® 39 and BODIPY® TR-X signals (DyeChrome™ Western Blot Stain Kits #4–6).

The **Amplex® Gold photographic filter** (A24772), which has the same transmittance profile as the “green” filter used in the DyeChrome™ Red/Green Photographic Filter Set (Figure 1), is optimal for detecting the fluorescence of the oxidized Amplex® Gold horseradish peroxidase substrate, which is used in our Amplex® Gold Western Blot Stain Kits #1, #2 and #3.

### **Storage and Handling**

The gel stain photographic filters should be stored in a cool, dry place and handled only at the edges. These gelatin filters can be cleaned using a lint-free cloth or lens tissue in combination with either water or ethanol.

If the filter needs to be cut to fit into a specialized holder, we recommend first placing the filter between two sheets of clean, fairly stiff paper and then cutting out the desired shape with sharp scissors.

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### **Product List** *Current prices may be obtained from our Web site or from our Customer Service Department.*

Cat #	Product Name	Unit Size
A24772	Amplex® Gold photographic filter.....	each
D24771	DyeChrome™ Red/Green Photographic Filter Set *two filters* .....	1 set
S7569	SYBR® photographic filter.....	each
S37100	SYBR® Safe photographic filter.....	each
S6656	SYPRO® photographic filter .....	each

## Contact Information

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Order Phone: (800) 438-2209  
Order Fax: (800) 438-0228

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