

## SYBR® Green Nucleic Acid Gel Stains

Sensitive Fluorescent Stains for DNA and RNA

SYBR® Green Nucleic Acid Gel Stains are fluorescent stains for detecting DNA and RNA, exhibiting excellent signal-to-noise ratio with minimal background. SYBR® Green Stains are more sensitive than standard stains, making them convenient alternatives to silver staining and radioisotopes. For maximum detection, gels should be post-stained and photographed with the SYBR® Green Photographic Filter.

### SYBR® Green I Stain

- Detects as little as 60 pg of dsDNA and 1 ng oligonucleotides
- Optimal for analysis of PCR products in gels, apoptosis studies, and heteroduplex analysis

### SYBR® Green II Stain


- Detects 100 pg of ssDNA and 2 ng of RNA
- Optimal for RNA gel electrophoresis and SSCP analysis

### SYBR® Green Gel Stain Photographic Filter

- Required for optimal sensitivity with black and white film
- Suitable for use with most Polaroid® Systems

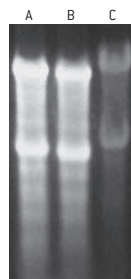
#### ■ Applications

- DNA and RNA detection
- SSCP and heteroduplex analysis

 -20° C for stain  
18° C to 26° C for photographic filter

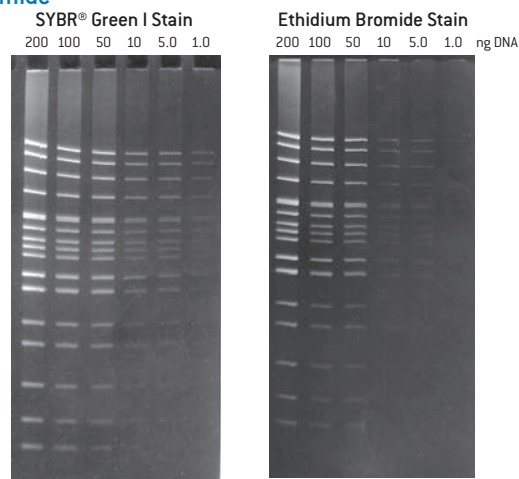
 [www.lonza.com/sourcebook](http://www.lonza.com/sourcebook)

### RNA Detection with SYBR® Green II Stain



Samples of *E. coli* total RNA were denatured using the following denaturants: Lane A: Formaldehyde/Formamide; Lane B: Formamide; Lane C: Glyoxal. Samples were loaded at 2 µg/lane for the formaldehyde/formamide and formamide only denatured samples, and 4 µg/lane for the glyoxal denatured samples. Reliant™ RNA Precast Agarose Gels were run at 7 V/cm for 40 minutes in 1X MOPS Buffer and post stained with SYBR® Green II Gel Stain and photographed on the Clare Chemical Research, Inc., Dark Reader® Transilluminator.

### DNA Stained with SYBR® Green I Stain or Ethidium Bromide



DNA samples (pBR322 *Msp* I digest) ranging from 1 to 200 ng per lane were separated on a 10 cm × 16 cm × 0.1 cm, 4% vertical MetaPhor™ Agarose gel prepared in 1X TBE buffer. The gel was run for 1 hour at 488 V/cm. Following electrophoresis the gel was divided into two, and one half was stained with 1 µg/mL ethidium bromide while the other was stained with SYBR® Green I Stain (1:10,000 dilution of stock). Detection was achieved with standard 300 nm UV transillumination.

### Ordering Information – SYBR® Green I Nucleic Acid Stain

Cat. No. NA	Cat. No. EU	Product Name	Product Description	Storage Conditions	Size
50513	50513	SYBR® Green I Nucleic Acid Stain	Supplied as a 10,000X concentrated solution in DMSO	-20°C	10 × 50 µL
50512	50512	SYBR® Green I Nucleic Acid Stain	Supplied as a 10,000X concentrated solution in DMSO	-20°C	2 × 500 µL
50523	50523	SYBR® Green II Nucleic Acid Gel Stain	Supplied as a 10,000X concentrated solution in DMSO	-20°C	10 × 50 µL
50522	50522	SYBR® Green II Nucleic Acid Gel Stain	Supplied as a 10,000X concentrated solution in DMSO	-20°C	2 × 500 µL
50530	50530	SYBR® Green Gel Stain Photographic Filter	Wratten® #15	18°C to 26°C	3 inch square

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