

**Lumiprobe Corporation** 

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### dsGreen Nucleic Acid Gel Staining Solution, 10000×

http://www.lumiprobe.com/p/dsgreen-i-gel-stain

dsGreen is a sensitive dsDNA binding dye, which can be used for routine DNA detection in agarose and polyacrylamide gels. A gPCR grade reagent is also available.

Unlike ethidium bromide, dsGreen is highly selective towards double stranded DNA, much less harmful, and offers better sensitivity.

# Comparison between ethidium bromide and dsGreen

Feature	<b>Ethidium Bromide</b>	dsGreen
Fluorescence	Red (615 nm)	Green (524 nm)

Excitation maximum 302 nm 454 nm

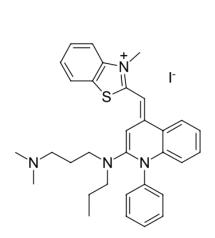
Excitation light source UV only

Blue light or UV

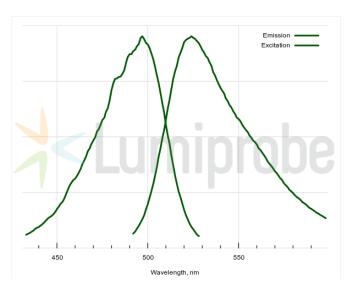
Sensitivity 2 ng / band (dsDNA) 0.08 ng / band (dsDNA)

100 ng / band (RNA) 1-2 ng / band (oligonucleotides)

Health hazard High Low



dsGreen I structure



Excitation and emission spectra of dsDNA complex with dsGreen

#### **General properties**

Appearance: orange solution

Quality control: NMR <sup>1</sup>H, HPLC-MS (95%), functional testing

Storage conditions: Storage: 24 months after receival at -20°C in the dark. Transportation: at room

temperature for up to 3 weeks. Avoid prolonged exposure to light.

Legal statement: This Product is offered and sold for research purposes only. It has not been tested for

safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food

or pharmaceutical products, in medical devices or in cosmetic products.

## **Spectral properties**

Excitation/absorption maximum, nm: 490  $\epsilon$ , L·mol<sup>-1</sup>·cm<sup>-1</sup>: 73000 Emission maximum, nm: 524 Fluorescence quantum yield: 0.8

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### Kit

Storage time in months: