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## dsGreen Nucleic Acid Gel Staining Solution, 10000x

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 qPCR 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 | Ethidium Bromide | dsGreen |
| :--- | :--- | :--- |
| Fluorescence | Red $(615 \mathrm{~nm})$ | Green (524 nm) |
| Excitation maximum | 302 nm | 454 nm |
| Excitation light source | UV only | Blue light or UV |
| Sensitivity | $2 \mathrm{ng} /$ band (dsDNA) | $0.08 \mathrm{ng} /$ band (dsDNA) |
|  | $100 \mathrm{ng} /$ band (RNA) | $1-2 \mathrm{ng} /$ band (oligonucleotides) |
| Health hazard | High | Low |


dsGreen I structure


Excitation and emission spectra of dsDNA complex with dsGreen

## General properties

Appearance:
Quality control:
Storage conditions:

Legal statement:
orange solution
NMR ${ }^{1} \mathrm{H}, \mathrm{HPLC}-\mathrm{MS}$ (95\%), functional testing
Storage: 24 months after receival at $-20^{\circ} \mathrm{C}$ in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light.
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
$\varepsilon, \mathrm{L} \cdot \mathrm{mol}^{-1} \cdot \mathrm{~cm}^{-1}$ : 73000
Emission maximum, nm: 524
Fluorescence quantum yield: 0.8

Kit
Storage time in months: 12

