Lumiprobe Corporation
115 Airport Dr Suite 160
Westminster, Maryland 21157
USA
Phone: +1 888 973 6353
Fax: +1 888 973 6354
Email: order@lumiprobe.com

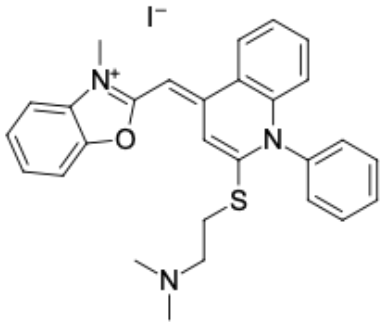
ssGreen® RNA Gel Staining Solution, 10,000×

http://www.lumiprobe.com/p/ssgreen-ii-gel-stain

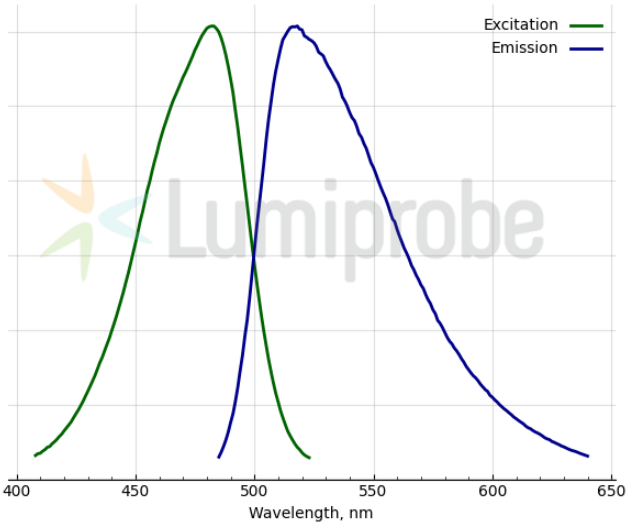
ssGreen® is one of the most sensitive stains for post-electrophoresis staining of RNA and single-stranded DNA (ssDNA) in agarose or polyacrylamide gels. The fluorescence quantum yield of the ssGreen/RNA complex is more than 7× higher than that of the ethidium bromide/RNA complex. Although ssGreen is not selective for RNA staining, the dye exhibits about 1.5× greater quantum yield when bound to RNA than double-stranded DNA, which makes it unique among all nucleic acid dyes.

ssGreen staining is compatible with denaturing gels. On agarose/formaldehyde and polyacrylamide/urea gels, the sensitivity of ssGreen is slightly reduced but still superior to that of ethidium bromide. Staining agarose/formaldehyde gels with ssGreen does not interfere with transfer of RNA to filters or subsequent hybridization in Northern blot analysis as long as 0.1%–0.3% SDS is included in prehybridization and hybridization buffers.

Staining gels with ssGreen has fewer steps than those with ethidium bromide. Because the fluorescence of ssGreen/RNA complexes is not quenched by formaldehyde or urea, there is no need to wash these denaturants out of gels before staining. Also, ssGreen stain has a low intrinsic fluorescence, allowing gel viewing and photographing without preliminary removing unbound dye.



Structure of ssGreen Gel Staining



Excitation and emission spectra of RNA complex with ssGreen

General properties

Appearance:	dark orange solution
Molecular weight:	581.52
CAS number:	172827-25-7
Molecular formula:	$C_{28}H_{28}IN_3OS$
Quality control:	UV-Vis abs
Storage conditions:	24 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.
Legal statement:	Product is offered and sold for research purposes only. Product is not tested for safety and efficacy in food, drug, medical device, cosmetic, no express or implied authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, for humans or animals or for commercial purposes.

Spectral properties

Excitation/absorption maximum, nm: 483 (complex)

Emission maximum, nm:	518 (complex)