



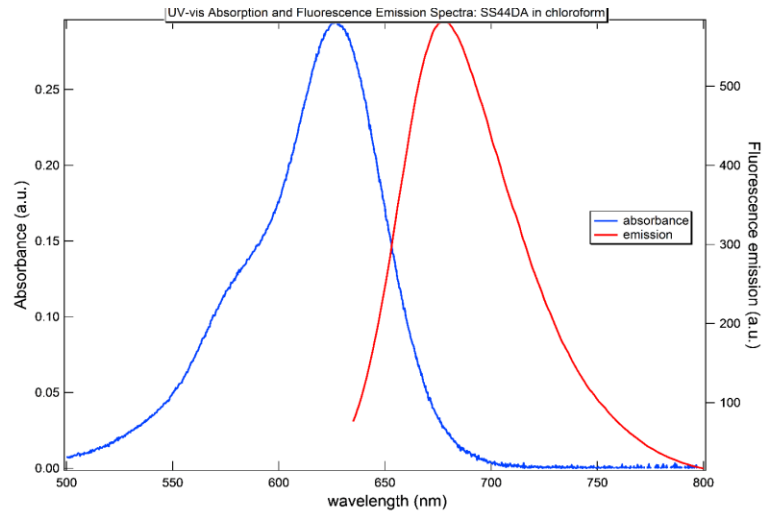
## VOLTAGE SENSITIVE DYE DATA SHEET

<b>Dye name</b>	SS44DA
<b>Molecular Weight</b>	711.6
<b>Appearance</b>	blue-green solid and blue solution
<b>Solubility</b>	1 mg/mL in chloroform, ethanol and DMSO
<b>Emission Characteristics</b>	emissive when dissolved in non-polar solvent or embedded in membrane; non-emissive in polar solvent (e.g. water)
<b>Storage Conditions</b>	4 °C and protected from exposure to light
<b>Dye Loading Concentrations</b>	200-600 nM for microscopy; 300-1500 nM for electrophysiology; 300 nM most preferred
<b>Dye Response Time</b>	5 ms to maximum response
<b>Voltage Sensitivity (<math>\Delta F/F</math>)</b>	9 % (All-optical assay with HEK293 cells) <sup>2</sup>

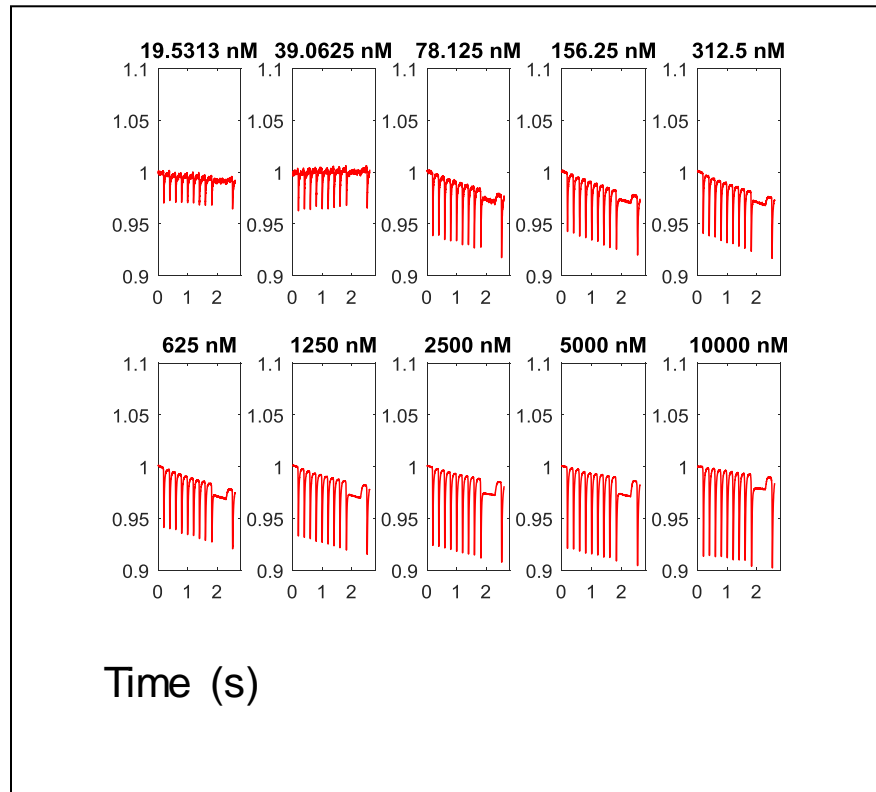
	SPECIFICATION
<b>Absorption</b> <sup>1</sup> Maximum Extinction	627 nm 62000 cm <sup>-1</sup> M <sup>-1</sup>
<b>Fluorescence</b> <sup>1</sup> Emission Maximum	685 nm
<b>LC</b> Purity	consistent with > 95 %
<b>NMR</b> Result	consistent with structure
<b>Miscellaneous Information</b> Lot notes	N/A

1. Solvent: Chloroform.
2. Laser excitation at 635 nm.

## Absorption & Emission Spectra



## Voltage Response (HEK293 cells)



**Microscopy Images  
(Xenopus model)**

