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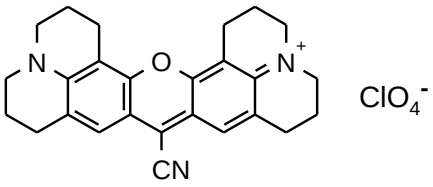
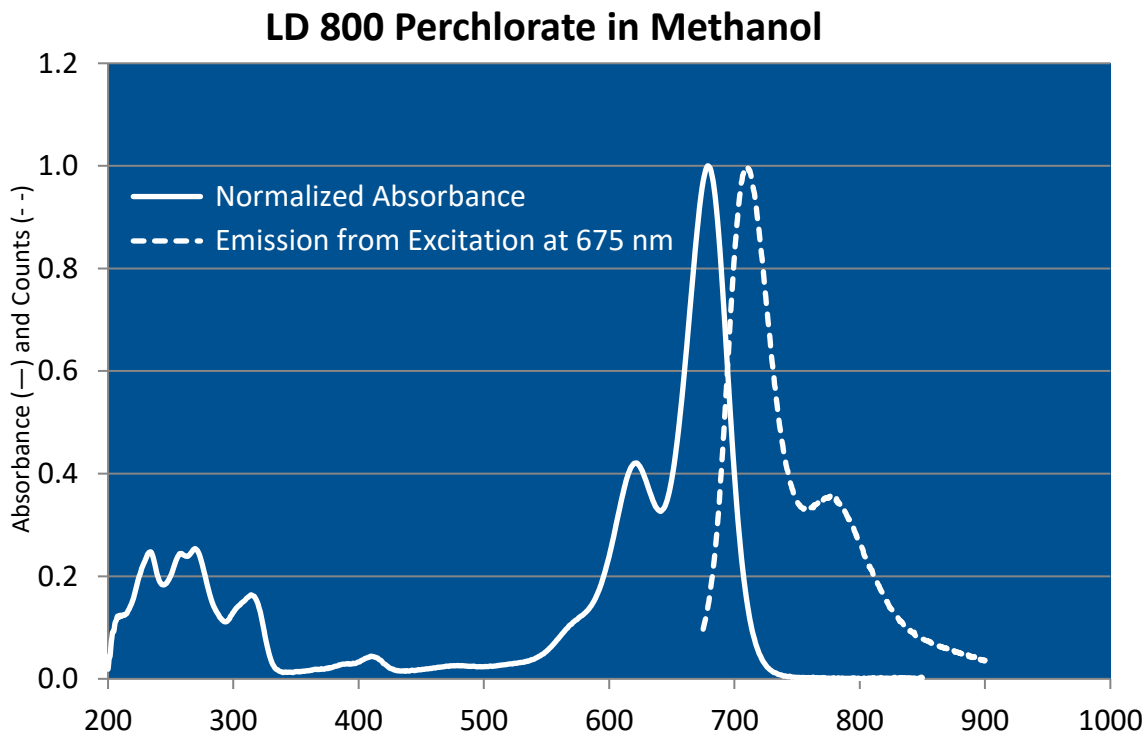
LD 800

Synonym: 9-Cyano-2,3,6,7,12,13,16,17-octahydro-1H,5H,11H,15H-xantheno[2,3,4-ij:5,6,7,-i'j']diquinolizin-4-ium perchlorate; Rhodamine 800
Catalog No.: 08000
CAS No.: 137993-41-0
Chemical Formula: $C_{26}H_{26}N_3O.ClO_4$ **MW:** 495.96
Appearance: Dark green crystals
Structure:



Lasing Wavelength Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	Fl λ-max
782	769-805	FL^{69}	Methanol	8.0×10^{-5}	$693^{pc/eg}$	$717^{pc/eg}$
803	785-814	FL^{69}	PC/EG,1/1	8.0×10^{-5}	676^{m}	704^{m}
818	796-835	FL^{69}	DMSO	8.0×10^{-5}	695^{s}	
796	730-834	Kr^{182}	EG	4.2×10^{-4}	681^{m}	

eg = ethylene gylcol, m = methanol, pc = propylene carbonate, s = DMSO, DMSO = dimethylsulfoxide, EG = ethylene glycol, PC = propylene carbonate



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Quantum Yields and Lifetimes

Absorbance (nm)	Emission (nm)	Quantum Yield (max = 1.0)	Solvent	Lifetime (ns)	References, Notes
693	716		EG/PC		R-3
	0.086		Methanol		CD-1

REFERENCES:

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182. Dyestuff Lasers and Light Collectors-Two New Fields of Application for Heterocyclic Compounds, R. Raue, H. Harnisch and K.H. Drexhage, *Heterocycles*, 21(1), 167 (1984)

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R-3. Kiton Red S and Rhodamine B. The Spectroscopy and Laser Performance of Red Laser Dyes, J.M. Drake, R.I. Morse, R.N. Steppel and D. Young, Chem. Phys. Lett. 35(2), 181 (1975), https://doi.org/10.1016/0009-2614(75)85310-3

For a current list of biology, biological stain, or biochemistry references for LD 800 from PubMed, click on the following link:

LD 800 or Rhodamine 800