

COUMARIN 545

Synonym: 10-(2-benzothiazolyl)-2,3,6,7-tetrahydro-1H,5H,11H-[1]benzopyrano[6,7,8-ij]quinolizin-11-one

Catalog No.: 05451

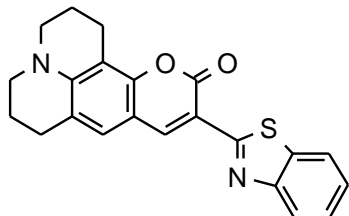
CAS No.: 85642-11-1

MW: 374.46

Chemical Formula: C₂₂H₁₈N₂O₂S

Appearance: Red-orange crystals

Structure:

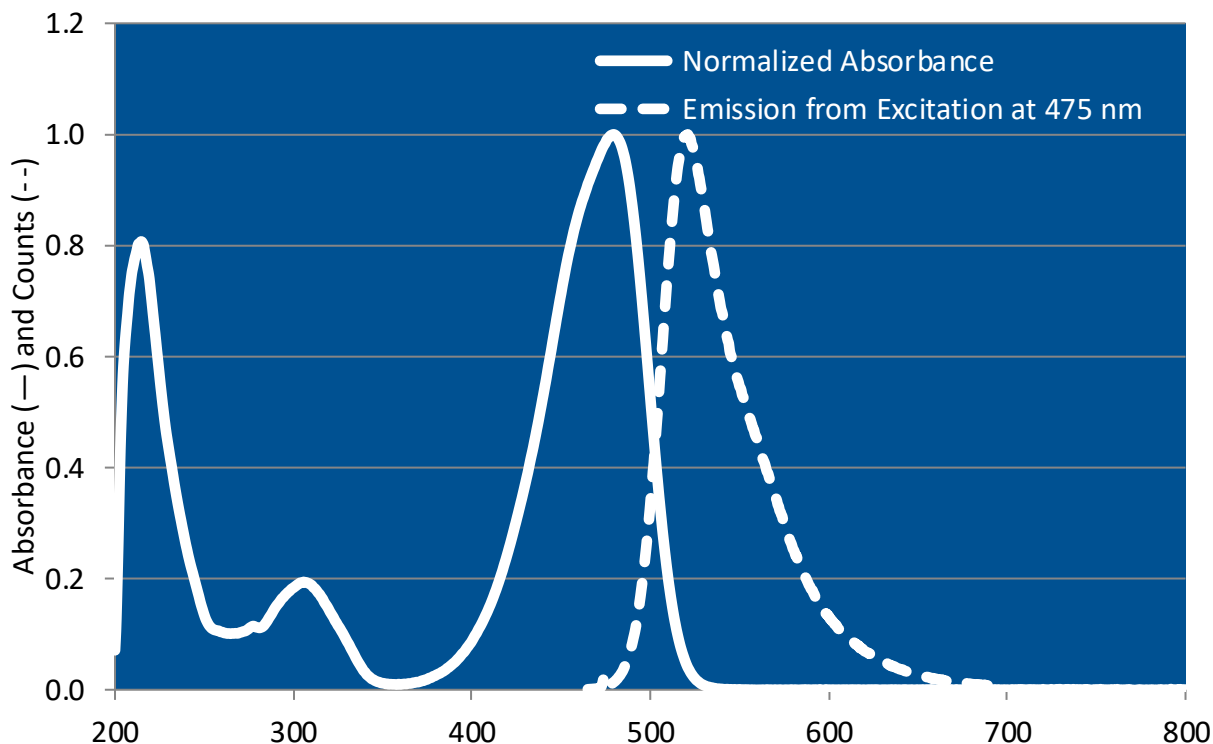


Lasing Wavelength

Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Abs λ-max	Fl λ-max
547	541-554	FL(triaxial) ¹⁵⁷	Ethanol	480 ^e	519 ^e
555	547-564	FL(triaxial) ¹⁵⁷	EtOH/H ₂ O, 1/1		

EtOH/H₂O=ethanol/water, e=ethanol

Coumarin 545 in Methanol



The information presented above is believed to be accurate but is not a specification. The customer is fully responsible for determining the suitability of this product for use in their application. Exciton, Inc. does not represent that the information is sufficient or complete for any specific application.

Quantum Yields and Lifetimes

Absorbance (nm)	Emission (nm)	Quantum Yield (max = 1.0)	Solvent	Lifetime (ns)	References, Notes
480	519	0.9	Ethanol		C-6a
490	526	0.96	Ethanol/Water (50:50)		C-6a

REFERENCES:

157. Lasing and Fluorescent Characteristics of Nine, New, Flashlamp-Pumpable, Coumarin Dyes in Ethanol:Water, A.N. Fletcher, D.E. Bliss and J.M. Kauffman, *Optics Commun.*, 47(1), 57 (1983)

C-6a. Lasing and Fluorescent Characteristics of Nine, New, Flashlamp Pumpable, Coumarin Dyes in Ethanol and Ethanol:Water, A.N. Fletcher, D.E. Bliss, and J.M. Kauffman, *Optics Commun.*, 47(1), 57 (1983), [https://doi.org/10.1016/0030-4018\(83\)90336-X](https://doi.org/10.1016/0030-4018(83)90336-X) **Note A:** Under air

For a current list of biology, biological stain, or biochemistry references for Coumarin 545 from PubMed, click on the following link:

[Coumarin 545](#)