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COUMARIN 503

Synonym: 7-(ethylamino)-6-methyl-4-(trifluoromethyl)-2H-1-benzopyran-2-one; Coumarin 307

Catalog No.: 05030

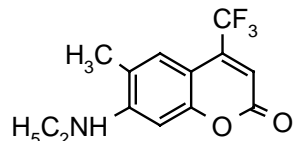
CAS No.: 55804-70-1

MW: 271.24

Chemical Formula: C₁₃H₁₂F₃NO₂

Appearance: Yellow crystals

Structure:



Max. Lasing Wavelength (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ -max	FI λ -max
498	477-531	FL ³	Ethanol	1 x 10 ⁻⁴	395 ^e	490 ^e
502		FL ¹⁹	Ethanol		393 ^m	
504	481-530	FL ³	Methanol + LO	1 x 10 ⁻⁴		
500	480-537	XeCl(308) ¹¹⁰	Methanol	7 x 10 ⁻³		
501	476-542	XeCl(308) ¹¹⁸	Ethanol	7.2 x 10 ⁻³ (osc)		
504	479-562	XeCl(308) ¹¹⁴	Methanol	12 x 10 ⁻³		
500	480-540	Nd:YAG(355) ²³⁹	Ethanol	1.5 x 10 ⁻³		
505	483-541	Nd:YAG(355) ¹¹⁰	Methanol	8 x 10 ⁻⁴		
474	451-537	N ₂ (337) ¹¹⁴	p-Dioxane	6 x 10 ⁻³		
500	472-555	N ₂ (337) ¹¹⁴	Ethanol	6 x 10 ⁻³		
504	471-573	N ₂ (337) ⁹⁰	Ethanol	6.3 x 10 ⁻³		

LO=Ammonyx LO, e=ethanol, m=methanol

REFERENCES:

- Phase-R Corporation, Box G-2 Old Bay Rd., New Durham, NH 03855
- New Coumarin Dyes with Rigidized Structure for Flashlamp-Pumped Dye Lasers, G.A. Reynolds and K.H. Drexhage, *Optics Commun.*, 13(3), 222 (1975)
- Jobin Yvon, 16-18 rue du Canal B.P. 118, 91163 Longjumeau Cedex France
- Lumonics Inc., 105 Schneider Road, Kanata, (Ottawa), Ontario, Canada K2K 1Y3
- Optimization of Spectral Coverage in an Eight-Cell Oscillator-Amplifier Dye Laser Pumped at 308nm, F. Bos, *Appl. Optics*, 20, 3553 (1981)
- The XeCl Excimer Laser: A Powerful and Efficient UV Pumping Source for Tunable Dye Lasers, H. Telle, W. Huffer and D. Basting, *Optics Commun.*, 38(5,6), 402 (1981)
- P. Jauernik, private commun., Sirah Laser- und Plasmatechnik, 2003.

For a current list of biology, biological stain, or biochemistry references for Coumarin 503 from PubMed, click on the following link:

[Coumarin 307](#)