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LD 490

Synonym: 2,3,6,7-tetrahydro-1H,5H,11H-[1]benzopyrano[6,7,8-ij]-quinoliz-11-one; Coumarin 6H

Catalog No.: 04900

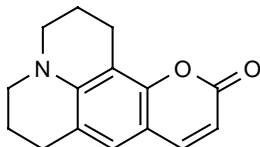
CAS No.: 58336-35-9

MW: 241.37

Chemical Formula: C₁₅H₁₅NO₂

Appearance: Yellow needles

Structure:



Lasing Wavelength Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ -max	FI λ -max
479	459-523	FL ³	Ethanol	1 x 10 ⁻⁴	396 ^m	474 ^m
488	470-534	FL ⁶⁹	Methanol	6 x 10 ⁻⁵		476 ^e
489	459-528	FL ⁶¹	Methanol	2 x 10 ⁻⁴		488 ^{e/w}
490		FL ¹⁸	Ethanol			
492	465-529	FL ³	Methanol + LO	1 x 10 ⁻⁴		
500	-480-525-	FL ¹²	MeOH/H ₂ O,1/1	2.3 x 10 ⁻⁴		
480	472-487	Nd:YAG(355) ⁵⁴	Ethanol	5 x 10 ⁻⁴		
489	466-518	Nd:YAG(355) ⁹¹	Methanol	1.4 x 10 ⁻³ (osc), 3.7 x 10 ⁻⁴ (amp)		
490	-477-512-	Ar ²⁴	EG			
493	470-516	Ar ¹⁷³	EG	4.1 x 10 ⁻³		
494	479-507	Ar(SF) ²⁴	EG			

e = ethanol; m = methanol; w = water

EG = ethylene glycol; H₂O = water; LO = ammonyx LO; MeOH = methanol

REFERENCES:

- Phase-R Corporation, Box G-2 Old Bay Rd., New Durham, NH 03855
- Chromatix, 560 Oak Meade Parkway, Sunnyvale, CA 94086
- New Laser Dyes with Blue-Green Emission, E.J. Schimitschek, J.A. Trias, P.R. Hammond, R.A. Henry and R.L. Atkins, *Optics Commun.*, 16(30), 313 (1976)
- F.P. Roullard, private commun., 1976
- W. R. Green, private commun., 1977
- Efficient Cavity Dumped Dye Laser, R.G. Morton, M.E. Mack and I. Itzkan, *Appl. Optics*, 17(20), 3268 (1978)
- Candela Laser Corporation, 530 Boston Post Road, Wayland, MA 01778-1833
- R. Morrison, private commun., 1980
- J.A. Hoffnagle, private commun., 1987; CR 599-21 standing wave laser with Coumarin 515 optics (reflecting 460-600 nm), 2% outputcoupler, laser running multimode with 3-Plate Lyot Filter. At 793 nm, 23 mW of stable single mode output obtained.

For a current list of biology, biological stain, or biochemistry references for LD 490 from PubMed, click on the following link:

[LD 490 or Coumarin 6H](#)