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## COUMARIN 490

**Synonym:** 7-amino-4-(trifluoromethyl)-2H-1-benzopyran-2-one; Coumarin 151

**Catalog No.:** 04890

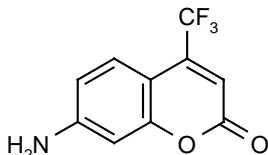
**CAS No.:** 53518-15-3

**MW:** 229.16

**Chemical Formula:** C<sub>10</sub>H<sub>6</sub>F<sub>3</sub>NO<sub>2</sub>

**Appearance:** Bright yellow crystalline needles

**Structure:**



Lasing Wavelength Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs $\lambda$ -max	Fl $\lambda$ -max
484		FL21	Ethanol		382 <sup>e</sup>	480 <sup>e</sup>
488		FL23	Ethanol		376 <sup>m</sup>	
489	467-510	FL61	Methanol	2 x 10 <sup>-4</sup>		
495	477-515	FL3	Methanol + LO	1 x 10 <sup>-4</sup>		
496		FL21	EtOH/H <sub>2</sub> O			

LO=Ammonyx LO, EtOH/H<sub>2</sub>O=ethanol/water, e=ethanol, m=methanol

### REFERENCES:

- Phase-R Corporation, Box G-2 Old Bay Rd., New Durham, NH 03855
- Laser Performance and Stability of Fluorinated Coumarin Dyes, E.J. Schimitschek, J.A. Trias, P.R. Hammond and R.L. Atkins, *Optics Commun.*, 11(4), 352 (1974)
- New Highly Efficient Laser Dyes, K.H. Drexhage and G.A. Reynolds, VII Int. Quantum Electronics Conf., Paper F. 1, San Francisco, CA., USA, 1974
- Efficient Cavity Dumped Dye Laser, R.G. Morton, M.E. Mack and I. Itzkan, *Appl. Optics*, 17(20), 3268 (1978)

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

[Coumarin 490 or Coumarin 151](#)