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COUMARIN 480

Synonym: 2,3,6,7-tetrahydro-9-methyl-1H,5H,11H-[1]benzopyrano-[6,7,8-ij]quinolizin-11-one; Coumarin 102

Catalog No.: 04800

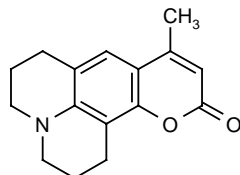
CAS No.: 41267-76-9

MW: 255.32

Chemical Formula: C₁₆H₁₇NO₂

Appearance: Pale yellow crystalline powder

Structure:



Lasing Wavelength Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	FI λ-max
474	456-503	FL ³	Ethanol	1.5 x 10 ⁻⁴	390 ^e	466 ^e
475	452-519	FL ⁶¹	Methanol	2 x 10 ⁻⁴		407 ^{c82}
478	457-520	FL ³	Methanol + LO	1.5 x 10 ⁻⁴		458 ⁿ
480	456-531	FL ¹¹	Methanol	2 x 10 ⁻⁴		473 ^e
482	456-530	FL ⁶⁹	Methanol	6 x 10 ⁻⁵		
	475-490	FL ⁶⁴	Methanol	2.2 x 10 ⁻⁴		
491		FL ¹²	MeOH/H ₂ O,1/1	2.3 x 10 ⁻⁴		
477	458-528	XeCl(308) ²⁰⁴	Methanol	8 x 10 ⁻³ (osc), 6.5 x 10 ⁻³ (amp)		
474	456-503	XeCl(308) ¹¹⁸	Ethanol	5.9 x 10 ⁻³ (osc)		
475		XeCl(308) ¹¹²	Ethanol	4 x 10 ⁻³		
476	461-506	XeCl(308) ¹¹⁰	Methanol	3 x 10 ⁻³		
478	457-517	XeCl(308) ¹¹⁴	Methanol	7.8 x 10 ⁻³		
479	461-513	XeCl(308) ¹¹⁰	Methanol	4 x 10 ⁻³		
473	452-500	Nd:YAG(355) ²³⁹	Ethanol	1.6 x 10 ⁻³		
475	459-508	Nd:YAG(355) ⁵³	Methanol	4.3 x 10 ⁻³ (osc), 1.8 x 10 ⁻³ (amp)		
477		Nd:YAG(355) ⁵⁴	Methanol	5 x 10 ⁻⁴		
477	458-507	Nd:YAG(355) ¹¹⁰	Methanol	8 x 10 ⁻⁴		
478	460-500	Nd:YAG(355) ⁵⁷	Methanol	1.6 x 10 ⁻³ (osc), 3.1 x 10 ⁻⁴ (amp)		
485		Nd:YAG(355) ⁵⁹	Methanol	7 x 10 ⁻⁴		
470	450-516	N ₂ (337) ¹¹⁴	Ethanol	5.5 x 10 ⁻³		
470	453-495	N ₂ (337) ⁵	Ethanol	1 x 10 ⁻²		
470	460-525	N ₂ (337) ¹⁸³	Methanol	35mg/20ml		
480	454-523	N ₂ (337) ⁹⁰	Ethanol	6.9 x 10 ⁻³		
470	451-514	Ar(uv,bb) ⁶⁸	EG/BzOH,9/1	3.2 x 10 ⁻³ +S420		
470	454-510	Ar(uv,SF) ⁶⁸	EG/BzOH,9/1	3.2 x 10 ⁻³ +S420		
477	460-518	Ar(Violet) ¹²³	EG/BzOH,5/1			
480	465-500	Ar(351/364) ¹³	20% aq.DPA	2 x 10 ⁻³		
483	463-515	Ar(350-386UV, C699 RDL) ²⁰⁶	EG/BzOH,7/3	7.85 x 10 ⁻³		
485	462-524	Ar(364-386) ¹⁸⁷	EG/BzOH,9/1	7.8 x 10 ⁻³		
490	445-506	Ar(cw) ¹⁴	EG			
473	458-520	Kr(406-415) ²⁰⁶	EG/BzOH,7/2	4.36 x 10 ⁻³ *		
490	460-516	Kr(violet),Ar(uv) ⁶⁸	BzOH/EG	80% pump absorption		



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Lasing Wavelength Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ -max	Fl λ -max
495	470-515 453-510	Kr(400-420) ¹⁷ N ₂ -He(428) ⁴⁹	EG Ethanol	1 x 10 ⁻²		

* This represents a maximum value. Concentration should be adjusted to 80-85% absorption of the pump light.

LO=Ammonyx LO, MeOH/H₂O=methanol/water, EG=ethylene glycol, BzOH=benzyl alcohol, e=ethanol, c=cyclohexane, n=acetonitrile

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For a current list of biology, biological stain, or biochemistry references for Coumarin 480 from PubMed, click on the following link:

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