

## COUMARIN 504

**Synonym:** 2,3,6,7-tetrahydro-11-oxo-1H,5H,11H-[1]benzopyrano[6,7,8-ij]quinolizine-10-carboxylic acid, ethyl ester;  
 Coumarin 314

**Catalog No.:** 05040

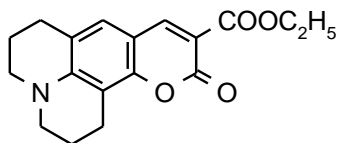
**CAS No.:** 55804-66-5

**MW:** 313.34

**Chemical Formula:** C<sub>18</sub>H<sub>19</sub>NO<sub>4</sub>

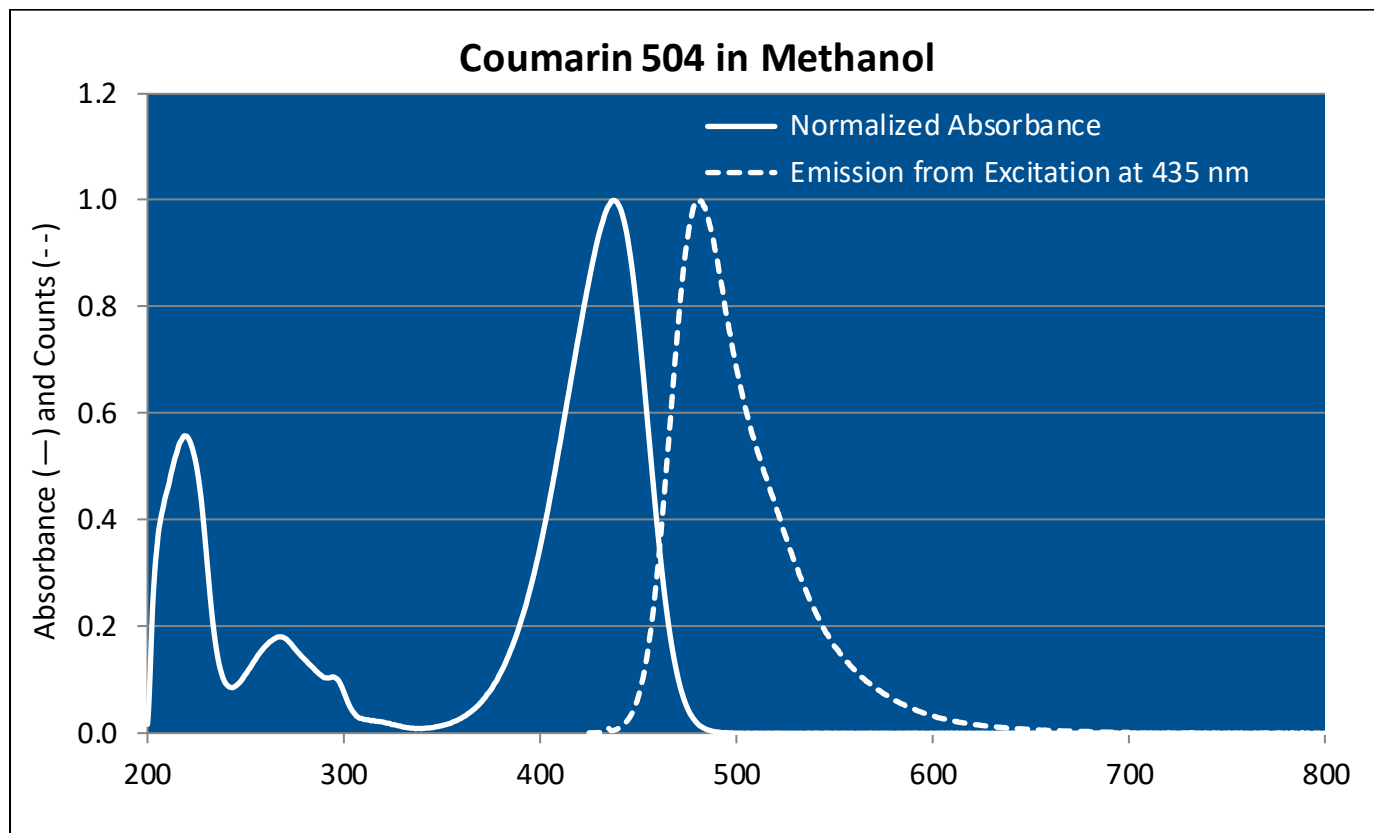
**Appearance:** Yellow crystals

**Structure:**



Lasing Wavelength Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	FI λ-max
499	484-537	FL <sup>3</sup>	Methanol + LO	1 x 10 <sup>-4</sup> + 1% LO	437 <sup>m</sup>	480 <sup>e</sup>
502		FL <sup>171</sup>	MeOH/H <sub>2</sub> O	1.9 x 10 <sup>-4</sup>	436 <sup>e</sup>	
503		FL(triaxial, uv filter) <sup>181</sup>	Methanol	A=4cm <sup>-1</sup>		
504		FL <sup>19</sup>	Ethanol			
505	-495-517-	FL <sup>69</sup>	MeOH/H <sub>2</sub> O, 1/1			
512		FL(triaxial, uv filter) <sup>181</sup>	EtOH/H <sub>2</sub> O	A=4cm <sup>-1</sup>		
515		FL(triaxial, uv filter) <sup>181</sup>	MeOH/H <sub>2</sub> O	A=4cm <sup>-1</sup>		
520	-506-544-	FL <sup>12</sup>	MeOH/H <sub>2</sub> O, 1/1	1.6 x 10 <sup>-4</sup>		

LO=Ammonyx LO, MeOH/H<sub>2</sub>O=methanol/water, EtOH=ethanol, e=ethanol, m=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
436		0.83	Ethanol		C-5
432	481	0.65	Ethanol		C-11
432	482	0.67	Methanol		C-11
436	486	1	DMSO		C-11
426	483	1	DMF		C-11
414	445	1	Cyclohexane		C-11
445	493	0.67	Water		C-11

**REFERENCES:**

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For a current list of biology, biological stain, or biochemistry references for Coumarin 504 from PubMed, click on the following link:

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