

KITON RED 620*

Synonym: N-[6-(diethylamino)-9-(2,4-disulfophenyl)-3H-xanthen-3-ylidene]-N-ethyl-ethanaminium hydroxide, inner salt, sodium salt; Sulforhodamine B

Catalog No.: 06200

CAS No.: 3520-42-1

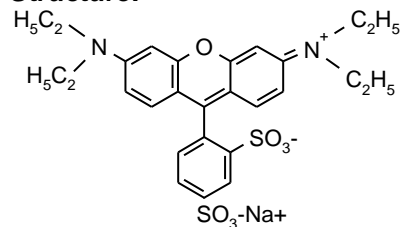
Chemical Formula: C₂₇H₂₉N₂O₇S₂Na

Molecular Weight: 580.66

Appearance: Dark red powder

Molar Absorptivity (in ethanol): 11.8 x 10⁴ L mole⁻¹ cm⁻¹

Structure:



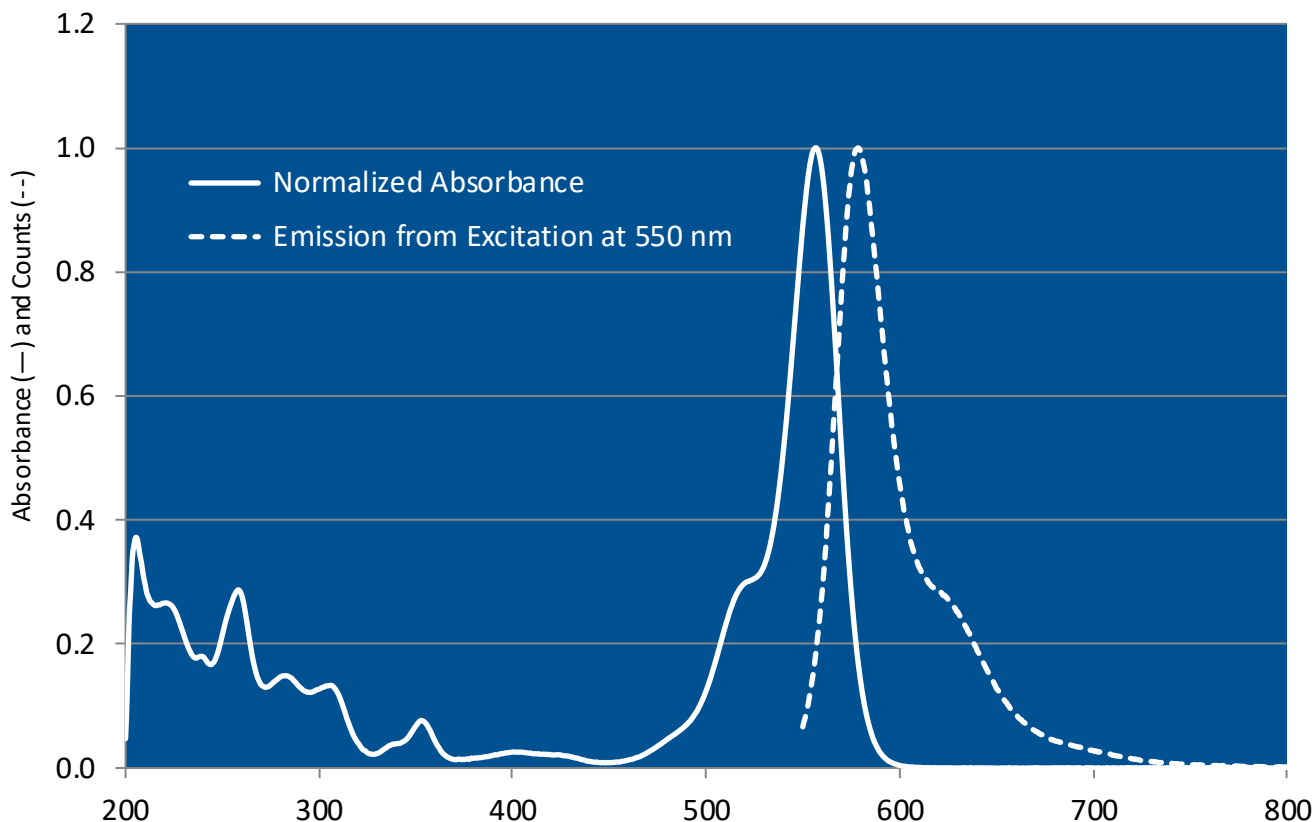
Max. Lasing Wavelength (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	FI λ-max
607	601-616	FL ¹²⁵	Methanol(pH 10.3)	1.5 x 10 ⁻⁴ (R590), 8 x 10 ⁻⁵ (KR620)	554 ^e	575 ^e
620	580-630	FL ²⁹	Ethanol			
620		FL ⁶²	Methanol	2 x 10 ⁻⁴ (KR620) + (R590)		
621	594-653	FL ⁶⁹	Methanol	4 x 10 ⁻⁵		
621	608-634	FL ⁶⁹	Methanol + COT			
623	598-649	FL ³	Ethanol + COT	3 x 10 ⁻⁵		
627	595-629	FL ³	Methanol + COT	3 x 10 ⁻⁵		
631	600-660	FL ^{11,29}	Methanol	1 x 10 ⁻⁴		
636	603-670	FL ⁶	EG			
637		FL ⁷³	DMSO			
642	622-665	FL ¹²	4% LO/H ₂ O	1.1 x 10 ⁻⁴		
627		FL (Triaxial) ²²⁷	Acrylic Copolymer	1.5 x 10 ⁻⁴		
602	590-645	XeCl(308) ¹¹⁸	Ethanol	1.3 x 10 ⁻³ (osc)		
603	596-638	XeCl(308) ¹¹⁰	Methanol	1 x 10 ⁻³		
612	597-640	XeCl(308) ¹¹⁰	Methanol	1 x 10 ⁻³		
584	578-606	Nd:YAG(532) ⁵⁷	Methanol	2.2 x 10 ⁻⁴ (osc), 2.8 x 10 ⁻⁵ (amp)		
591	585-600	Nd:YAG(532) ²³⁹	Ethanol	3.4 x 10 ⁻⁴		
596	582-620	Nd:YAG(355) ²³⁹	Ethanol	5.2 x 10 ⁻⁴		
596	584-613	Nd:YAG(532) ¹¹⁰	Methanol	1.5 x 10 ⁻⁴		
623	594-641	Nd:YAG(355) ¹¹⁰	Methanol	1 x 10 ⁻³		
628	603-647	N ₂ (337) ⁷³	TFE			
638	602-695	Ar(458-514) ²⁰⁶	EG/MeOH,7.5/1.5	4.3 x 10 ^{-3**}		
638	610-670	Ar(cw) ¹⁴	EG			
597	586-632	Cu(511,578) ¹⁵³	Methanol	8.1 x 10 ⁻⁴ (KR620)+ 2.8 x 10 ⁻⁴ (R590)		
601	590-639	Cu(511,578) ¹⁷⁵	Methanol	1 x 10 ⁻³		
605	588-639	Cu(511,578) ¹⁵³	Methanol	1.7 x 10 ⁻³		
617	-595-639-	Cu(511,578) ²⁸	TFE	1.7 x 10 ⁻³		
620	598-645	Cu(511,578) ¹⁷⁵	Methanol	3 x 10 ⁻³		

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

DMSO, S = Dimethylsulfoxide; e = Ethanol; EG = Ethylene Glycol; LO = Ammonyx LO; MeOH = Methanol; TFE = Trifluoroethanol

* Equivalent species may be provided or substituted

Kiton Red 620 in 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
		0.69	Ethanol	3.8	R-2a

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For a current list of biology, biological stain, or biochemistry references for Rhodamine 560 from PubMed, click on the following link:

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