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HITC

Synonym: 2-[7-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1,3, 5-heptatrienyl]-1,3,3-trimethyl-3H-indolium iodide or perchlorate; Hexacyanin 3

Catalog No.: 08422 (Iodide) or 08421 (Perchlorate)

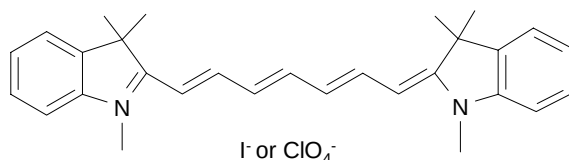
CAS No.: 19764-96-6 (08422) or 16595-48-5 (Perchlorate)

MW: 536.50 (08422) or 509.04 (08421)

Chemical Formula: C₂₉H₃₃N₂.I (08422) or C₂₉H₃₃N₂.ClO₄ (08421)

Appearance: Golden green (08422) or Green crystals (08421)

Structure:



Lasing Wavelength Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	FI λ-max
	770-830	FL→KR620(Red) ⁶²	DMSO		751 ^S	790 ^S
	800-882	FL→R640(664) ³	EG	1 x 10 ⁻⁴	743 ^e	
826	812-838	XeCl(308) ¹¹⁴	Methanol	1.4 x 10 ⁻³		
833	819-845	XeCl(308) ¹¹⁴	Ethanol/H ₂ O/LO,80/15/5	1.4 x 10 ⁻³		
835	805-880	XeCl(308) ¹¹⁴	DMF	1.4 x 10 ⁻³		
851	822-887	XeCl(308) ¹¹⁴	DMSO	2.3 x 10 ⁻³		
868	836-905	XeCl(308) ¹¹⁸	DMSO	2.2 x 10 ⁻³ (osc)		
871	829-909	XeCl(308) ¹¹⁰	DMSO	2 x 10 ⁻³		
805	795-830	Nd:YAG(532) ¹¹⁶	Ethanol/DMSO,2/1	6.5 x 10 ⁻⁵ (HITC), 9.5 x 10 ⁻⁴ (R640)		
806	788-832	Nd:YAG(532) ⁵³	DMSO			
815	800-849	Nd:YAG(532) ¹¹⁶	Ethanol	1.5 x 10 ⁻⁴ (HITC), 9.5 x 10 ⁻⁴ (R640)		
822		Nd:YAG→C720(700) ⁶⁶	DMSO	2 x 10 ⁻⁴		
849	(bb)	Nd:YAG(532) ¹⁰¹	DMSO	5 x 10 ⁻⁴		
802	794-815	N ₂ (337) ¹¹¹	DMSO	4.4 x 10 ⁻⁴ (DOTC), 8.9 x 10 ⁻⁵ (HITC)		
817	807-832	N ₂ (337) ¹¹¹	DMSO	3.4 x 10 ⁻⁴ (DOTC), 3.4 x 10 ⁻⁴ (HITC)		
840	824-869	N ₂ (337) ¹¹¹	DMSO	1.2 x 10 ⁻³		
846	828-891	N ₂ (337) ¹¹⁴	DMSO	2 x 10 ⁻³		
862	(bb)	N ₂ (337) ⁹⁷	DMSO	2 x 10 ⁻¹		
869	827-908	N ₂ (337) ⁹⁰	DMSO	2 x 10 ⁻³		
870	850-890	N ₂ (337) ¹⁸³	DMSO	15mg/20ml		
865	825-912	Kr(Red) ⁶⁸				
868	840-887	Kr(Red) ¹²³	EG/DMSO,4/1			
869	832-888	Kr(647,676) ³⁸	EG	1.5 x 10 ⁻³		
870	812-929	Kr(752,799) ^{36b}	DMSO & EG or G + COT	4 x 10 ⁻⁴		
870	828-909	Kr(647,676) ^{36b}	DMSO & EG or G + COT	1.3 x 10 ⁻³		
873	819-937	Kr(752) ¹⁰⁰	EG/DMSO,3/1	2.8 x 10 ⁻⁴		
	832-911	Kr(647) ⁷¹	EG/DMSO,3/1	1 x 10 ⁻³		
875	840-940	Kr ¹⁷	EG/DMSO,84/16	7.4 x 10 ⁻⁴		



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Lasing Wavelength		Pump Source (nm)	Solvent	Concentration (molar)	Abs λ -max	Fl λ -max
Max. (nm)	Range (nm)					
819		Ruby(694) ⁹⁵	Acetone	1×10^{-4}		
836		Ruby(694) ³⁷	EG			
	780-883	Ruby(694) ⁹⁶	DMSO	6×10^{-5}		
	790-840	Ruby(694) ³⁵	DMSO	3.7×10^{-4}		

DMSO = dimethylsulfoxide, EG = ethylene glycol, LO = Ammonyx LO, DMF = dimethylformamide, G = glycerol, COT = cyclooctatetraene, s = DMSO, e = ethanol

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