



PO Box 31126
Dayton, OH 45437
Tel: 937.252.2989 Fax: 937.258.3937
E-mail: info@exciton.com
www.exciton.com

IR 125

Synonym: 2-[7-[1,3-dihydro-1,1-dimethyl-3-(4-sulfobutyl)-2H-benz[e]indol-2-ylidene]-1,3,5-heptatrienyl]-1,1-dimethyl-3-(4-sulfobutyl)-1H-benz[e]indolium hydroxide, inner salt, sodium salt; Indocyanine Green, Cardiogreen, Foxgreen

Catalog No.: 09030

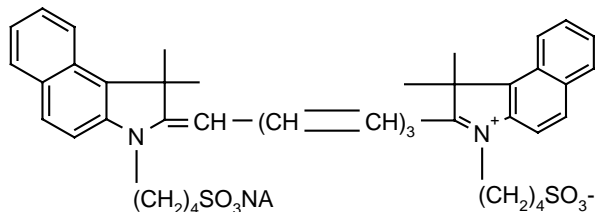
CAS No.: 3599-32-4

Chemical Formula: C₄₃H₄₇N₂O₆S₂.Na

MW: 774.97

Appearance: Dark green crystals

Structure:



| Max. Lasing Wavelength (nm) | Range (nm) | Pump Source (nm) | Solvent | Concentration (molar) | Abs λ -max | FI λ -max |
|-----------------------------|------------|-------------------------------------|---------|---|---------------------|-------------------|
| 940 | | FL ⁹⁹ | DMSO | 1 x 10 ⁻⁴ | 795 ^s | 833 ^s |
| 863 | 846-907 | Nd:YAG(532) ⁵³ | DMSO | | 786 ^e | |
| 903 | | Nd:YAG→C720(700) ⁶⁶ | DMSO | 2 x 10 ⁻⁴ | 778 ^w | |
| 913 | (bb) | Nd:YAG(532) ¹⁰¹ | DMSO | 5 x 10 ⁻⁴ | 800 ^{w/LO} | |
| 887 | 872-935 | N ₂ (337) ¹¹¹ | DMSO | 1.3 x 10 ⁻³ (IR-125), 1.3 x 10 ⁻³ (IR-144) | | |
| 908 | 884-930 | N ₂ (337) ⁹⁰ | DMSO | | | |
| 910 | 884-947 | N ₂ (337) ¹⁸³ | DMSO | 40mg/20ml | | |
| 915 | 879-943 | N ₂ (337) ¹¹¹ | DMSO | 1.67 x 10 ⁻³ | | |
| 915 | 885-947 | N ₂ (337) ¹¹¹ | DMSO | 2.5 x 10 ⁻³ | | |
| 870 | 833-937 | Ruby(694) ¹³³ | DMSO | 1 x 10 ⁻⁴ | | |

DMSO = Dimethylsulfoxide; e = ethanol; LO = Amonyx LO; s = DMSO; w = water;

REFERENCES:

53. Continuum, 3150 Central Expressway, Santa Clara, CA 95051, formerly, Quantel International
66. Near Infrared Dye Laser Pumped by a Carbazine 122 Dye Laser, K. Kato, *IEEE J. Quantum Electron.*, QE12, 442 (1976)
90. Jobin Yvon, 16-18 rue du Canal B.P. 118, 91163 Longjumeau Cedex France
99. Sixteen New Infrared Laser Dyes Excited by a Simple, Linear Flashlamp, J.P. Webb, F.G. Webster and B.E. Plourde, *IEEE J. Quantum Electron.*, QE11, 114 (1975)
101. Excited State Absorption and Laser Emission from Infrared Dyes Optically Pumped at 532 nm, C.D. Decker, *Appl. Phys. Lett.*, 27(11), 607 (1975)
111. Lasing Properties of Several Near-IR Dyes for a Nitrogen Laser-Pumped Dye Laser with an Optical Amplifier, B.M. Pierce and R.R. Birge, *IEEE J. Quantum Electron.*, QE18, 1164 (1982)
133. Operation of a High-Power, Broadly-Tunable Infrared Dye Laser, E.J. Seibert and L.G. Johnson, *Optics Commun.*, 39(3), 186 (1981)
183. Thermo Laser Science, 26 Landsdowne Street, Cambridge, MA 02139

For a current list of biology, biological stain, or biochemistry references for IR 125 from PubMed, click on the following link:

[IR 125](#)