

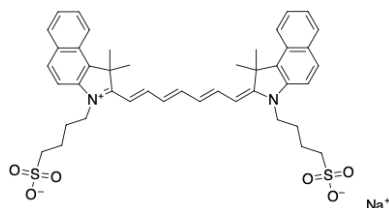
Indocyanine Green (ICG)

<http://www.lumiprobe.com/p/icg-3599-32-4>

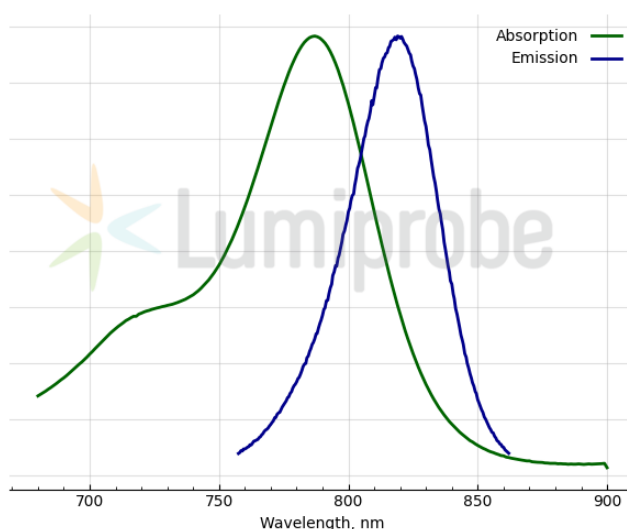
Indocyanine Green (aka ICG, IC Green, Foxgreen) is used for reliable imaging and flow cytometry. This dye is water-soluble and pH-insensitive. The fluorescence of Indocyanine Green is not visible to the human eye but is readily detected by most imaging systems.

Indocyanine Green binds tightly to plasma proteins and becomes confined to the vascular system. The dye has a half-life of 150 to 180 sec and is removed from circulation exclusively by the liver to bile juice.

Indocyanine Green is used for detection of hepatocyte-like cells, determining cardiac output, hepatic function, liver and gastric blood flow, and for ophthalmic angiography.



Structure of Indocyanine Green (ICG)



Indocyanine Green (ICG) absorbance and emission spectra

General properties

Appearance:	dark green powder
Molecular weight:	774.96
CAS number:	3599-32-4
Molecular formula:	$C_{43}H_{47}N_2NaO_6S_2$
Quality control:	NMR 1H and ^{31}P , HPLC-MS (95%)
Storage conditions:	Storage: 12 months after receipt at $-20^\circ C$ in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light. Desiccate.
Legal statement:	Product is offered and sold for research purposes only. Product is not tested for safety and efficacy in food, drug, medical device, cosmetic, no express or implied authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, for humans or animals or for commercial purposes.

Spectral properties

Excitation/absorption maximum, nm:	787
ϵ , $L \cdot mol^{-1} \cdot cm^{-1}$:	232000
Emission maximum, nm:	819
Fluorescence quantum yield:	0.09