

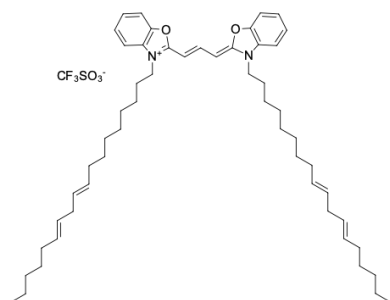
RAPID DiO, lipophilic tracer

<http://www.lumiprobe.com/p/fast-di-o-lipophilic-tracer>

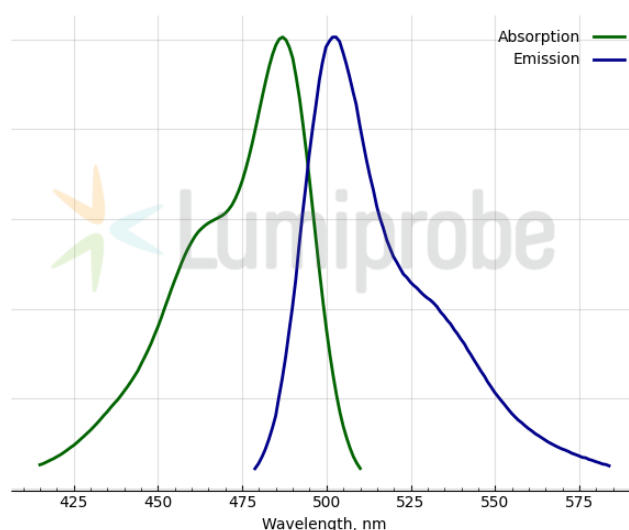
RAPID DiO (also known as FAST DiO™ and Dilinoleyl DiO) is a cyanine dye with green fluorescence, an unsaturated analog of DiO (DiOC18(3)).

RAPID DiO is a lipophilic dye that labels cell membranes by inserting its two long hydrocarbon (C18 carbon) chains into the lipid bilayer. The dye is weakly fluorescent until incorporated into membranes. RAPID DiO diffuses laterally to stain the entire cell, allowing it to be used as an anterograde and retrograde tracer of neurons. In intact tissue, the dye does not transfer from labeled to unlabeled cells, but some transfer may occur when the membrane is disrupted, for example, after sectioning. RAPID DiO has about 50% faster migration kinetics than [DiO](#).

RAPID DiO can be used with other tracers in dual-color studies, such as [RAPID DiI](#).



Structure of RAPID DiO, lipophilic tracer



Absorption and emission spectra of RAPID DiO

General properties

Appearance:	orange plasticine-like
Molecular weight:	923.28
Molecular formula:	C ₅₄ H ₇₇ F ₃ N ₂ O ₅ S
Quality control:	NMR ¹ H and HPLC-MS (95+%)
Storage conditions:	24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. 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:	487
ε, L·mol ⁻¹ ·cm ⁻¹ :	166000
Emission maximum, nm:	503
Fluorescence quantum yield:	0.1

FAST DiO™ is the trademark of Invitrogen™