

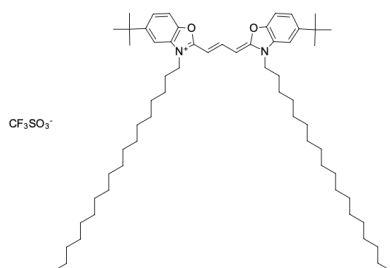
## Neuro-DiO, lipophilic tracer

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

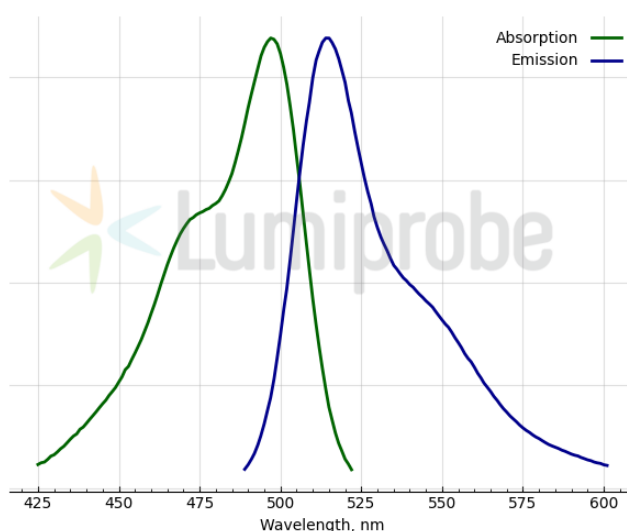
Neuro-DiO is a green fluorescent, lipophilic carbocyanine dye with excitation max. at 497 nm, and emission max. at 514 nm. Neuro-DiO is an analog of [DiO](#), a widely used anterograde and retrograde neuronal tracer for living and fixed tissues and cells. In contrast to DiO, Neuro-DiO has been specifically designed to improve solubility in membranes and prevent the formation of nonfluorescent aggregates, which tend to decrease the dye diffusion rate.

Neuro-DiO uniformly labels neurons via diffusion in the plasma membrane. 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.

Neuro-DiO can be used together with other lipophilic tracers ([Dil](#), [DiD](#), [DiR](#), etc.) in dual-color and multi-color studies.



**Structure of Neuro-DiO, lipophilic tracer**



**Absorption and emission spectra of Neuro-DiO**

### General properties

|                     |   |
|---------------------|---|
| Appearance:         | orange oil  |
| Molecular weight:   | 1043.56   |
| Molecular formula:  | $C_{62}H_{101}F_3N_2O_5S$   |
| Solubility:         | DMF, DMSO, ethanol  |
| Quality control:    | NMR $^1H$ 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: | 497 |
| Emission maximum, nm:              | 514 |