

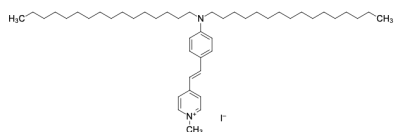
DiA, lipophilic tracer

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

DiA is a dialkylaminostyryl dye that fluoresces when inserted into membranes or diluted into organic solvents. DiA's excitation max is 492 nm, and emission max is 607 nm. Due to its broad emission spectrum, DiA can be detected in the green, orange, and red channels depending on the filter used.

DiA is widely used as an anterograde and retrograde neuronal tracer in living and fixed tissues and cells. DiA 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.

DiA can be used as a second-color neuronal tracer in conjunction with other neuronal tracers, for example, [Dil](#).



Structure of DiA, lipophilic tracer

General properties

| | |
|---------------------|---|
| Appearance: | red-brown solid |
| Molecular weight: | 787.06 |
| CAS number: | 114041-00-8 |
| Molecular formula: | C ₄₆ H ₇₉ IN ₂ |
| Solubility: | DMSO |
| 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: | 492 |
| ε, L·mol ⁻¹ ·cm ⁻¹ : | 50000 |
| Emission maximum, nm: | 607 |
| Fluorescence quantum yield: | 0.87 |