

Neuro-DiO

Biotium developed Neuro-DiO as a replacement for the green fluorescent DiO, which has been found to be difficult to use for neurons and cell suspension due to low solubility, tendency to form aggregates and slow lateral diffusion rate.



Product attributes

Probe cellular localization	Membrane/cell surface, Membrane/vesicular
For live or fixed cells	For fixed cells, For live/intact cells
Assay type/options	Co-cultures, Extended staining (several days to weeks)
Fixation options	Fix before staining (formaldehyde), Fix after staining (formaldehyde), Permeabilize before staining
Colors	Green
Excitation/Emission	484/501 nm

Product Description

Biotium developed Neuro-DiO as a replacement for the green fluorescent DiO, which has been found to be difficult to use for neurons and cell suspension due to low solubility, tendency to form aggregates and slow lateral diffusion rate. Neuro-DiO and DiO have nearly identical absorption and emission spectra, but the former has better solubility in membranes and does not form nonfluorescent aggregates, which also tend to slow down the dye diffusion rate in membranes. We also offer [Neuro-DiO in Vegetable Oil](#) for microinjection studies, and in our [CellBrite™ Green Cytoplasmic Membrane Dye](#), a ready-to-use dye solution for cell labeling.

- $\lambda_{Ex}/\lambda_{Em} = 484/501$ nm
- Yellow-orange solid soluble at 1-2 mM (with heating) in DMF, DMSO, or ethanol
- Soluble at 1-2 mM in vegetable oil with heating and sonication
- Store at 4°C, protect from light
- C₆₇H₁₀₅ClN₂O₅S
- MW: 1086

