

DiOC2(3)

DiOC₂(3) (3,3'-Diethyloxacarbocyanine, iodide) has been used for measuring membrane potentials in bacteria. The green fluorescent dye forms red fluorescent aggregates with increasing membrane potential.



Product attributes

Call us: 800-304-5357

CAS number	905-96-4
For live or fixed cells	For live/intact cells
Assay type/options	Real-time imaging
Potential dependence	Slow response (translational) membrane potential dye
Colors	Green
Excitation/Emission	482/407 nm

Product Description

DiOC₂(3) (3,3'-Diethyloxacarbocyanine, iodide) has been used for measuring membrane potentials in bacteria. The green fluorescent dye forms red fluorescent aggregates with increasing membrane potential. The spectral shifting phenomenon has been exploited to measure membrane potential ratiometrically.

- Ex/Em (MeOH) = 482/497 nm
- Orange solid soluble in DMSO or DMF
- Store at 4°C and protect from light
- C₂₁H₂₁IN₂O₂
- MW: 460.31
- [905-96-4]

$$\begin{array}{c|c} O \\ \hline \\ N+ \\ CH_2 \\ CH_3 \end{array} \begin{array}{c} CH=CH-CH = \\ N \\ CH_2 \\ CH_3 \end{array}$$

References

1) Biophys J 56, 979 (1989).

This datasheet was generated on January 1, 2026 at 07:07:57 AM. Visit product page to check for updated information before use. Product link: https://biotium.com/product/dioc23-33-diethyloxacarbocyanine-iodide