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Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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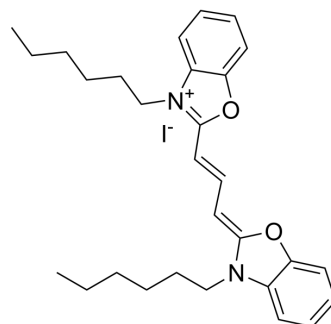
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3,3'-Dihexyloxacarbocyanine iodide

| | |
|---------------------------|--|
| Cat. No.: | HY-D0084 |
| CAS No.: | 53213-82-4 |
| Molecular Formula: | C ₂₉ H ₃₇ IN ₂ O ₂ |
| Molecular Weight: | 572.52 |
| Target: | Fluorescent Dye |
| Pathway: | Others |
| Storage: | 4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light) |



SOLVENT & SOLUBILITY

| | | | | | |
|---|--|--------------------------|--------------|-----------|------------|
| In Vitro | DMSO : 33.33 mg/mL (58.22 mM; Need ultrasonic) | | | | |
| | | Solvent Concentration | Mass 1 mg | 5 mg | 10 mg |
| | Preparing Stock Solutions | 1 mM | 1.7467 mL | 8.7333 mL | 17.4666 mL |
| | | 5 mM | 0.3493 mL | 1.7467 mL | 3.4933 mL |
| 10 mM | | 0.1747 mL | 0.8733 mL | 1.7467 mL | |
| Please refer to the solubility information to select the appropriate solvent. | | | | | |
| In Vivo | <ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 2.5 mg/mL (4.37 mM); Suspended solution; Need ultrasonic Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (4.37 mM); Clear solution | | | | |

BIOLOGICAL ACTIVITY

| | |
|--------------------|--|
| Description | 3,3'-Dihexyloxacarbocyanine iodide is a carbocyanine dye which can be used to monitor changes in mitochondrial membrane potential. |
| In Vitro | <p>Addition of cells to the cuvette containing 0.25 μM 3,3'-Dihexyloxacarbocyanine iodide (DiOCg(3)) leads to an increase in fluorescence, equilibration is rapid and is complete by 4 min. When f-met-leu-phe (10⁻⁷ M) is added to neutrophils preequilibrated with 3,3'-Dihexyloxacarbocyanine iodide, there is a short lag period of 5 seconds. The lag period is followed by a rapid loss of fluorescence. Examination of 3,3'-Dihexyloxacarbocyanine iodide loaded neutrophils using fluorescence microscopy demonstrates that in resting neutrophils the brightest fluorescence is associated with long thin organelles which corresponds to the distribution of mitochondria^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> |

PROTOCOL

Cell Assay ^[1]

Neutrophils ($2.5 \times 10^6/\text{mL}$) are preequilibrated in $0.25 \mu\text{M}$ 3,3'-Dihexyloxycarbocyanine iodide (DiOC₆(3)) for 5 min at 37°C in a 1 cm path length cuvette. Final volume is 2 mL. Fluorescence measurements are made in a spectrofluorimeter (emission wavelength: 510 nm, excitation wavelength: 470 nm). Stimuli are injected by a syringe through an injection port on the spectrofluorimeter, and their volumes never exceed 5% (v/v)^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Korchak HM, et al. A carbocyanine dye, DiOC₆(3), acts as a mitochondrial probe in human neutrophils. *Biochem Biophys Res Commun*. 1982 Oct 29;108(4):1495-501.

Caution: Product has not been fully validated for medical applications. For research use only.

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