

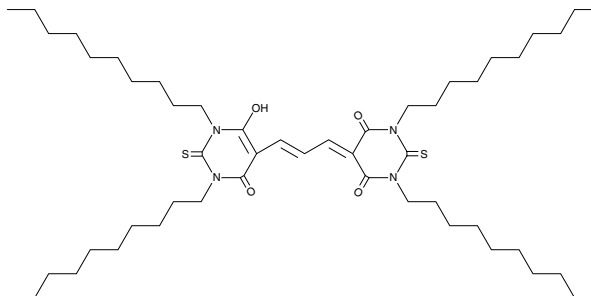
Product Information



DISBAC₁₀

Item No. 200280

CAS Registry No.: 169211-45-4
Formal Name: 1,3-didecyl-5-[3-(1,3-didecylhexahydro-4,6-dioxo-2-thioxo-5-pyrimidinyl)-2-propenylidene]dihydro-2-thioxo-4,6(1H,5H)-pyrimidinedione
MF: C₅₁H₈₈N₄O₄S₂
FW: 885.4
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A solution in methyl acetate
UV/Vis.: λ_{max}: 541 nm



Laboratory Procedures

For long term storage, we suggest that DISBAC₁₀ be stored as supplied at -20°C. It should be stable for at least one year.

DISBAC₁₀ is a dark pink oil supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as acetone or ethyl acetate purged with an inert gas or nitrogen can be used. The solubility of DISBAC₁₀ should be approximately 10 mg/ml in these solvents.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

DISBAC₁₀ is a fluorophore, which can be used in the study of cellular membrane electrical activity. In a resting polarized cell, DISBAC₁₀ resides on the outer leaflet of the membrane where it can accept photons from excited fluorescein-labeled proteins and re-emit the photons at a higher wavelength (fluorescence resonance energy transfer - FRET). Depolarization of the cell causes rapid translocation if DISBAC₁₀.

References

1. González, J. and Tsien, R.Y. Voltage sensing by fluorescence resonance energy transfer in single cells. *Biophys. J.* **69**, 1272-1280 (1995).

Related Products

ThioFluor 623 - Item No. 13083 • 3-dodecanoyl-NBD Cholesterol - Item No. 13220 • 3-hexanoyl-NBD Cholesterol - Item No. 13221 • SIRT1 FRET-Based Screening Assay Kit - Item No. 10010991

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery**.

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