

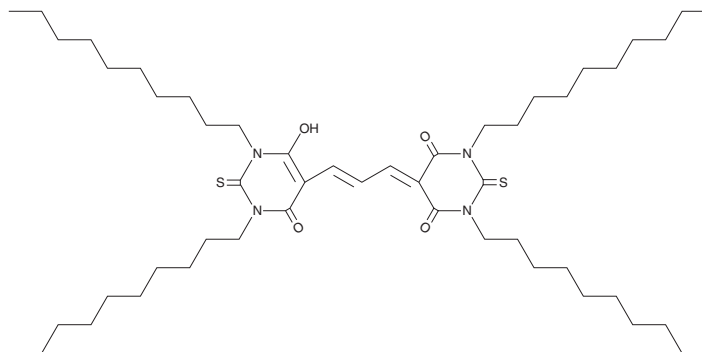
# PRODUCT INFORMATION



## 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:** C<sub>51</sub>H<sub>88</sub>N<sub>4</sub>O<sub>4</sub>S<sub>2</sub>  
**FW:** 885.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 541 nm  
**Supplied as:** A 10 mg/ml solution in methyl acetate  
**Storage:** -20°C  
**Stability:** ≥1 year



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

DISBAC10 is 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 in these solvents is approximately 10 mg/ml.

### Description

DISBAC10 is a voltage-sensitive fluorescent probe used to study cell membrane electrical activity using FRET.<sup>1</sup> DISBAC10 displays excitation/emission spectra of 540/560 nm, respectively. In a resting polarized cell, DISBAC10 resides on the outer leaflet of the membrane where it accepts photons from excited fluorescein-labeled proteins and re-emits the photons at a higher wavelength.<sup>1</sup> Depolarization of the cell causes rapid translocation of DISBAC10 to the inner leaflet of the membrane, thereby increasing the distance between fluorophores and reducing the FRET signal. DISBAC10 can also be used in conjunction with fluorescein-labeled antibodies or receptor ligands to visualize specific cell classes.

### Reference

1. González, J. and Tsien, R.Y. Voltage sensing by fluorescence resonance energy transfer in single cells. *Biophys J.* **69**(4), 1272-1280 (1995).

**WARNING**  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

**WARRANTY AND LIMITATION OF REMEDY**  
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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