

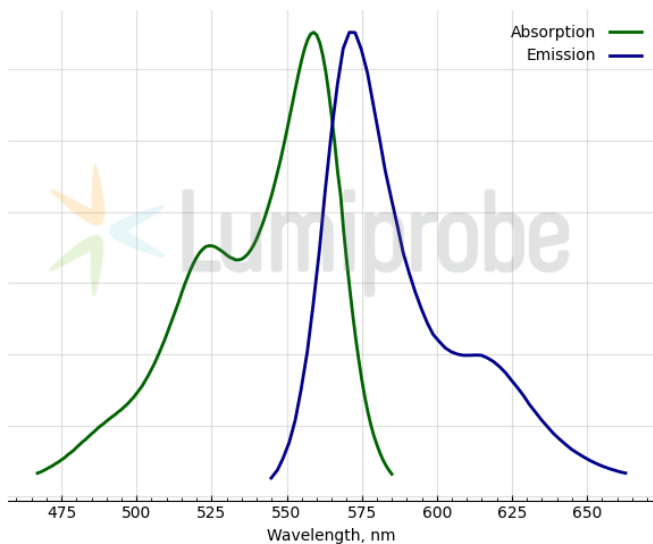
Cyanine3B TCO

<http://hk.lumiprobe.com/p/cy3b-tco-axial>

Cyanine3B TCO is a derivative of the Cyanine3B dye functionalized with trans-cyclooctene (TCO) for rapid and selective conjugation to tetrazine-containing biomolecules.

The dye belongs to the cyanine family of orange-red fluorophores and is characterized by high molar absorptivity, high fluorescence quantum yield, and improved photostability compared to conventional Cyanine3. Cyanine3B provides bright and stable fluorescence signals in fluorescence microscopy, flow cytometry, FRET experiments, and super-resolution imaging applications.

The TCO moiety reacts rapidly and selectively with tetrazines without the need for catalysts via the inverse electron-demand Diels—Alder (IEDDA) reaction, enabling biomolecule labeling under mild conditions, including in live cells. The reaction features by fast kinetics, excellent biocompatibility, and minimal background signal.



外观:

分子量: 811.06

分子式: $C_{46}H_{58}N_4O_7S$

溶解度:

质量控制: NMR 1H 和 HPLC-MS (95+%)

储存条件: 收到後 -20°C 避光保存 24 個月。運輸: 室溫最多可保存3週。乾燥。避免長時間暴露在光線下。

法律声明: 本產品僅供研究目的提供和銷售。本產品並未經過食品、藥品、醫療器械、化妝品等領域的安全性和效力測試，且未經明示或暗示授權用於其他任何用途，包括但不限於體外診斷、人類或動物用途，以及商業用途。

激发/吸收极大值, 纳米: 559

ϵ , 摩尔吸光系数, cm^{-1} : 121000

发射极大值, 纳米: 571

荧光量子产率: 0.68

CF₂₆₀: 0.044

CF₂₈₀: 0.077