

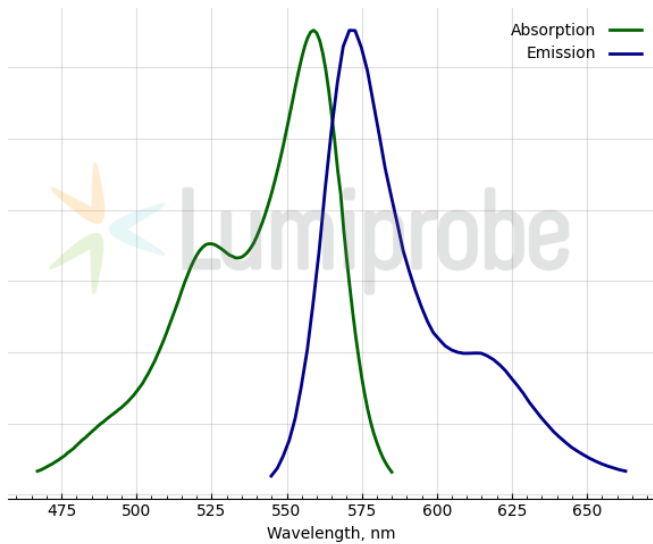
## Cyanine3B TCO

<http://cn.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 811.06

量:

分子  $C_{46}H_{58}N_4O_7S$

式:

溶解

度:

质量 NMR  $^1H$  和 HPLC-MS (95+%)

控制:

储存 收到后 -20°C 避光保存 24 个月。运输: 室温下最多可保存3周。干燥。避免长时间暴露在光线下。

条件:

法律 本产品仅供研究目的提供和销售。本产品并未经过食品、药品、医疗器械、化妆品等领域的安全性和效力测试, 且未经明示或暗示授权用于其他任何用途, 包括但不限于体外诊断、人类或动物用途, 以及商业用途。

激发/ 559

吸收

极大

值,

纳米:

$\epsilon$ , 摩 121000

尔吸

光系

数  $\sigma^2$

发射 571

极大

值,

纳米:

荧光 0.68

量子

产率:

$CF_{260}$ : 0.044

$CF_{280}$ : 0.077