

## BDPep 630/650 NHS ester

<http://cn.lumiprobe.com/p/bdp-630-650-spps-nhs-ester>

BDPep 630/650 NHS ester (Dicyano BDP 630/650 NHS ester) is a versatile fluorescent dye with a range of applications in biological and chemical research. The dye is ideal for high-resolution imaging of cellular structures and dynamic processes, providing bright and distinct signals that enhance visualization. Its strong fluorescence allows for effective cell sorting and phenotyping, making it useful in various immunological and cellular studies.

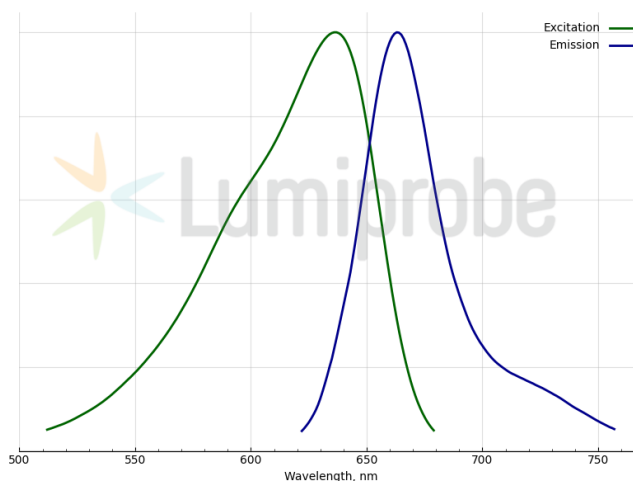
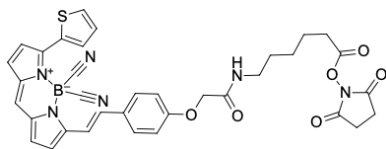
Its remarkable stability in strong acidic TFA media makes it particularly suitable for solid-phase peptide synthesis (SPPS).

Dicyano BDP 630/650 is employed in Förster Resonance Energy Transfer (FRET) assays to investigate molecular interactions and dynamics with high sensitivity. Due to its long excited-state lifetime, this dye is beneficial for detecting binding interactions between molecules, making it valuable in drug discovery and biochemical assays.

The NHS ester form enables efficient labeling of proteins and other biomolecules, that contain a functional amino group. Presence of the C6 spacer allows for more flexibility in conjugation reactions with various biomolecules, making it easier to label proteins and peptides without compromising the dye's fluorescent properties, particularly C6 spacer reduces negative quenching effects.

The dye is typically dissolved in high-quality anhydrous organic solvents such as dimethylformamide (DMF) and dimethylsulfoxide (DMSO), which facilitate its use in conjugation reactions and other applications. Dicyano BDP 630/650 exhibits hydrophobic characteristics, making it less suitable for direct use in aqueous environments compared to more water-soluble dyes like [AF 647 NHS ester](#). Once conjugated to biomolecules, the resulting dicyano BDP 630/650 conjugates can be used in aqueous applications such as fluorescence microscopy and flow cytometry, where they provide reliable fluorescent signals.

BDP 630/650 is characterized by excellent photostability, allowing for prolonged imaging sessions without substantial loss of signal, making it suitable for applications that require extended observation periods.



外观: 深紫色粉末

分子 674.53

量:

分子  $C_{35}H_{31}BN_6O_5S$

式:

溶解 适用于 DMF、DMSO、二氯甲烷

度:

质量 NMR  $^1H$  和 HPLC-MS (95+%)

控制:

储存 收到后在  $-20^{\circ}C$  黑暗条件下可保存 12 个月。运输: 室温下最多可保存 3 周。干燥。

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/ 637

吸收  
极大  
值，  
纳米:

$\epsilon$ , 摩 84000  
尔吸  
光系  
数  $m^2$

发射 663  
极大  
值，  
纳米:

荧光 0.44  
量子  
产率:

CF<sub>260</sub>: 0.17

CF<sub>280</sub>: 0.18