

**Lumiprobe Corporation** 

115 Airport Dr Suite 160 Westminster, Maryland 21157

美國

手機: +1 888 973 6353 傳真: +1 888 973 6354

電子郵件: <u>order@lumiprobe.com</u>

## Cyanine3 phosphoramidite

http://hk.lumiprobe.com/p/cy3-phosphoramidite-5

Cyanine3 is a fluorophore that is widely used in molecular biology experiments such as oligonucleotide labeling followed by oligonucleotide detection. By its spectral characteristics, Cyanine3 is a dye with a fluorescence maximum at 570 nm in the yellow spectrum range.

Cyanine3 phosphoramidite 5' is used in oligonucleotide synthesis for the production of 5'-cyanine3-labeled oligonucleotides. The reagent is compatible with various oligonucleotide synthesizers.

This phosphoramidite can be used for the synthesis of fluorescence-labeled primers and hybridization probes such as TaqMan and Molecular Beacon. Such labeled probes can be detected in multiplex real-time PCR in the TAMRA channel.

## **Usage:**

Condensation: 3 min. Use 0.02 M iodine solution at the oxidation step to avoid degradation of the cyanine dye.

Deprotection: At room temperature with 30% aqueous ammonium solution. It is recommended to use nucleic bases with labile protective groups for deprotection for not more than 2 h at less than  $55^{\circ}$ C. AMA (30% aqueous ammonium solution/40% aqueous methylamine 1:1 (v/v)) can be used for 10 min at  $65^{\circ}$ C in the presence of acetyldeoxycytidine. If deoxyguanidine with a dimethylformamidine protective group is used during synthesis, deprotect with 30% aqueous ammonium solution for 2 h at  $65^{\circ}$ C. If deoxyguanidine with an isobutyryl protective group is used during synthesis, deprotect for 24-36 h at room temperature.

外观:

分子量: 841.81

分子式: C<sub>45</sub>H<sub>65</sub>N<sub>5</sub>BF<sub>4</sub>O<sub>3</sub>P

溶解度: 质量控制: 储存条件:

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

業用涂。

激发/吸收极大值,纳米: 555 ε,摩尔吸光系数, cm<sup>-1</sup>: 150000 发射极大值,纳米: 570 荧光量子产率: 0.31  $CF_{260}$ : 0.04  $CF_{280}$ : 0.09

稀释剂: 偶联条件: 解保护条件: