

## Cyanine3 phosphoramidite

<http://cn.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.

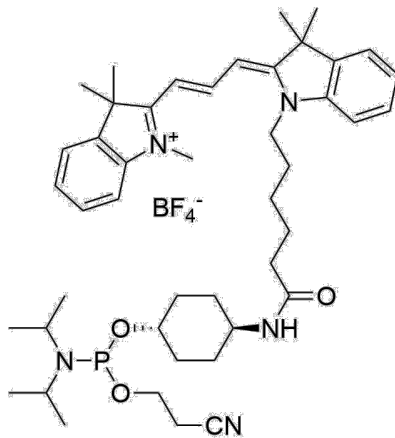
Cyanine3 phosphoramidite 5' is used in oligonucleotide synthesis for the production of 5'-cyanine3-labeled oligonucleotides. The reagent is compatible with various oligonucleotide synthesizers.

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°C. AMA (30% aqueous ammonium solution/40% aqueous methylamine 1:1 (v/v)) can be used for 10 min at 65°C in the presence of acetyldeoxycytidine. If deoxyguanine with a dimethylformamide protective group is used during synthesis, deprotect with 30% aqueous ammonium solution for 2 h at 65°C. If deoxyguanine with an isobutryl protective group is used during synthesis, deprotect for 24-36 h at room temperature.



外观:

分子量: 841.81

分子式:  $C_{45}H_{65}N_5BF_4O_3P$

溶解度:

质量控制:

储存条件:

激发/吸收极大值, 纳米: 555

$\epsilon$ , 摩尔吸光系数,  $cm^{-1}$ : 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: