

## TAMRA phosphoramidite, 5-isomer

<http://cn.lumiprobe.com/p/tamra-phosphoramidite-5>

This phosphoramidite is used for synthesis of oligonucleotides 5'-labeled with TAMRA.

TAMRA (carboxytetramethylrhodamine) is a xanthene dye from the rhodamine family with emission in the orange spectrum range (maximum at 563 nm). This fluorophore is traditionally used as a FRET-acceptor (and a quencher) in a pair with fluorescein (FAM) due to significant overlapping of their spectra. Thus, this phosphoramidite is convenient for the synthesis of dual-labeled probes TaqMan, which contain 5'-terminal TAMRA and FAM in the middle of the sequence or at the 3'-end (using [Fluorescein dT Phosphoramidite](#) and [FAM CPG](#), respectively).

TAMRA 5'-labeled oligonucleotides are commonly used for quantitative PCR and fragment analysis (for example, for microsatellite marker analysis) because the equipment available has a detection channel for TAMRA frequently.

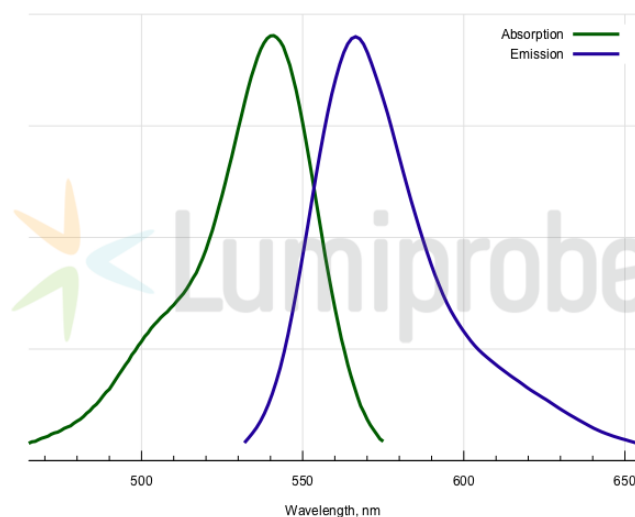
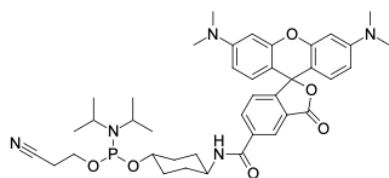
The TAMRA dye is not stable in the presence of ammonium and sterically non-hindered primary amines, so it is strongly recommended to follow specified conditions for labeled oligonucleotide deprotection.

## Usage

Coupling: 7.5 min.

Deprotection: tert-butylamine : methanol : water 1 : 1 : 3 (v/v/v) («TAMRA cocktail») for 6 hours at 60 °C, then cool down to room temperature.

Due to complete and irreversible degradation of the TAMRA dye, do NOT use aqueous ammonium and AMA for deprotecting a modified oligonucleotide from the solid-phase support.



外观:

质谱 589.60

M+

增量:

分子 727.83

量:

分子 C<sub>40</sub>H<sub>50</sub>N<sub>6</sub>O<sub>6</sub>P

式:

溶解

度:

质量

控制:

储存

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: 断、人类或动物用途, 以及商业用途。

激发/ 541  
吸收  
极大  
值，  
纳米:

$\epsilon$ , 摩尔吸  
光系数  $m^2$  84000

发射 567  
极大  
值，  
纳米:

$CF_{260}$ : 0.32  
 $CF_{280}$ : 0.19

稀释  
剂: