

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.

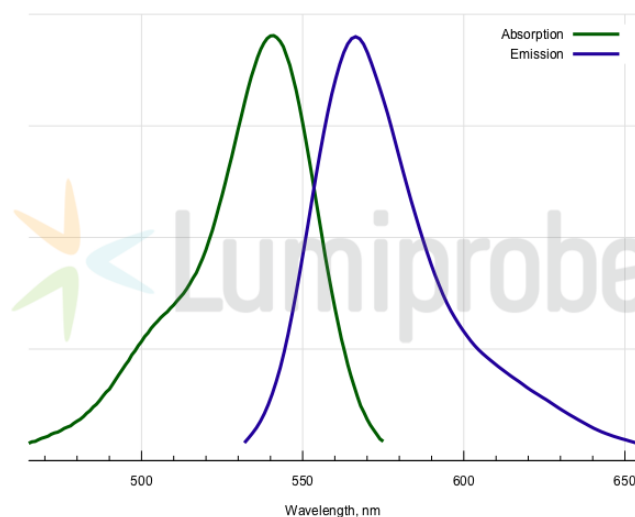
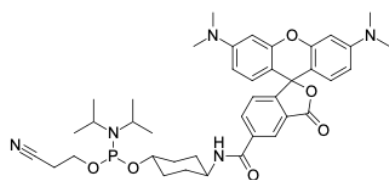
The TAMRA dye is not stable in the presence of ammonium and sterically non-hindered primary amines, so it is strongly recommended to follow specified conditions for labeled oligonucleotide deprotection.

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 $C_{40}H_{50}N_6O_6P$

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、人类或动物用途，以及商业用途。

激发/ 541
吸收
极大
值，
纳米:

ϵ , 摩 84000
尔吸
光系
数 m^2

发射 567
极大
值，
纳米:

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

稀释
剂: