

TAMRA CPG 500, 5-isomer

<http://www.lumiprobe.com/p/tamra-cpg-5>

Controlled pore glass solid support with TAMRA for the synthesis of 3'-labeled oligonucleotides.

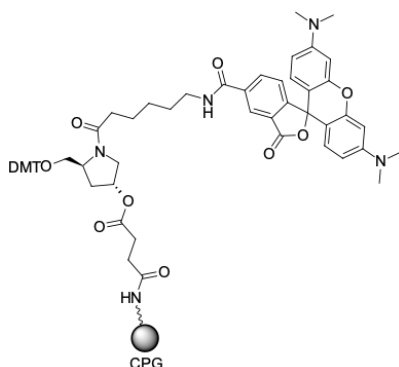
TAMRA CPG supports allow for the introduction of a reporter/quencher to be used in probe-based assays, like TaqMan probes for real-time PCR quantification and FRET experiments, which require that oligonucleotides be doubly labeled.

The proposed solid support 500 Å provides an optimal yield of oligonucleotides up to 50 mer. The TAMRA dye is not stable in the presence of ammonium, so it is strongly recommended to follow specified conditions for labeled oligonucleotide deprotection.

Usage

Coupling: standard time depending on the first monomer.

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



Structure of TAMRA CPG 500, 5-isomer

General properties

Appearance:	deep pink beads
Quality control:	NMR ^1H and HPLC-MS (95+%)
Storage conditions:	24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate. Avoid prolonged exposure to light.

Spectral properties

Excitation/absorption maximum, nm:	541
ϵ , L·mol $^{-1}$ ·cm $^{-1}$:	84000
Emission maximum, nm:	567
Fluorescence quantum yield:	0.1
CF $_{260}$:	0.32
CF $_{280}$:	0.19

Oligo synthesis details

Pore size, Å:	500
Typical loading, $\mu\text{mol/g}$:	50–70