

FAM phosphoramidite, 6-isomer (hydroxyprolinol)

<http://www.lumiprobe.com/p/fam-amidite-pro-6>

FAM phosphoramidite, 6-isomer (Pro) is a hydroxyprolinol-derived reagent suitable for 5' and internal labeling. Hydroxyprolinol-based (FAM) phosphoramidite is a modifying reagent for the synthesis of labeled with fluorescein oligonucleotides.

For the purpose of the introduction of fluorescent labels this type of phosphoramidites is obtained with a 6-aminohexanoate linkage as a spacer between the skeleton and the functional group.

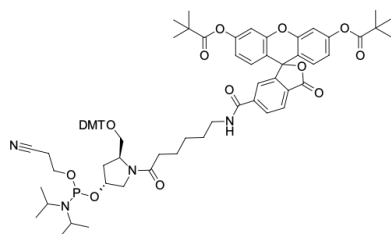
This modifying reagent with the core of hydroxyprolinol, also has a dimethoxythryl protection group making available reversed phase HPLC (RP-HPLC) or reversed-phase cartridge purification.

Recommendations for using the reagent:

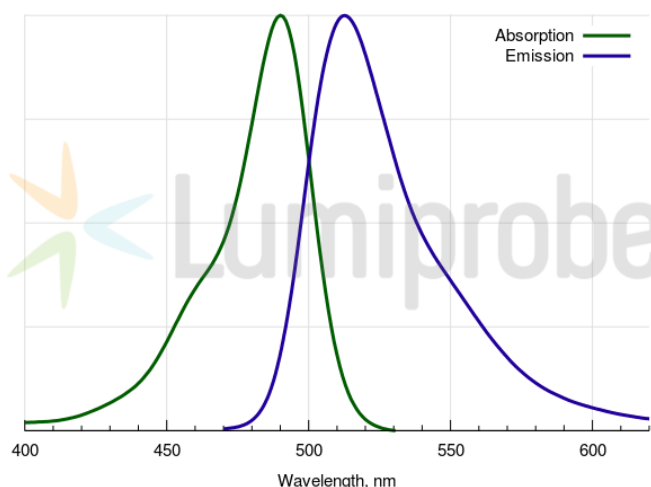
Coupling: 6 min.

Deprotection: Standard conditions with 25 % ammonium hydroxide; deprotection time depends on the composition of nucleic acids and their protective groups.

AMA (1:1 mixture of concentrated aqueous ammonium hydroxide / 40 % aqueous methylamine) can be used for 2 hours at room temperature or 10 min at 65 °C.



Structure of FAM phosphoramidite, 6-isomer (hydroxyprolinol)



Absorption and emission spectra of FAM

General properties

Appearance:	off-white solid
Molecular weight:	1259.44
Molecular formula:	C ₇₂ H ₈₃ N ₄ O ₁₄ P
Quality control:	NMR ¹ H and HPLC-MS (95+%)
Storage conditions:	12 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate. Avoid prolonged exposure to light.
Legal statement:	Product is offered and sold for research purposes only. Product is not tested for safety and efficacy in food, drug, medical device, cosmetic, no express or implied authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, for humans or animals or for commercial purposes.

Spectral properties

Excitation/absorption maximum, nm: 492

Emission maximum, nm: 517

Oligo synthesis details

Coupling conditions: 6 min coupling time recommended

Deprotection conditions: identical to protected nucleobases