

## VIC phosphoramidite, 6-isomer

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

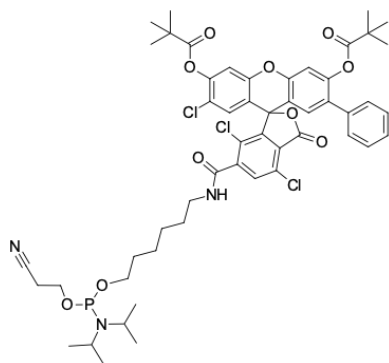
VIC is an asymmetrical xanthene dye (two flanking rings are not the same). This dye is used for the design of qPCR probes. The spectral properties of VIC are similar to HEX and JOE.

This phosphoramidite reagent allows to introduce the label onto 5'-terminus of the oligonucleotide.

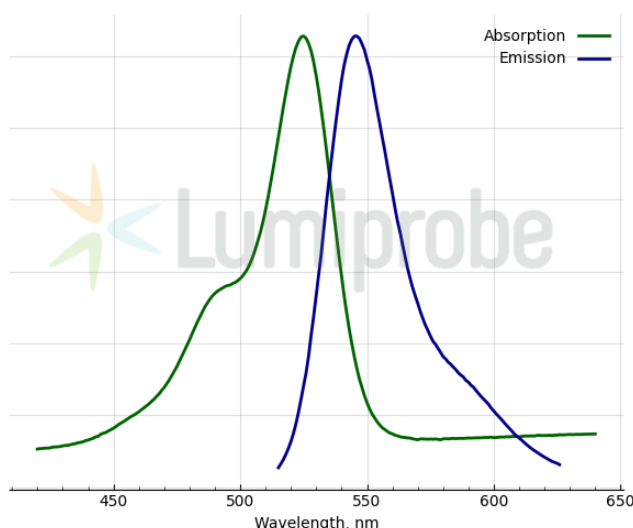
## Recommendations for using the reagent:

Coupling: 10 minutes.

Deprotection: standard conditions with ammonium hydroxide; AMA (solution of 30% ammonium hydroxide/40% aqueous methylamine 1:1 v/v) (15 minutes at 65°C) can be used with minor side product forming.



Structure of VIC amidite, 6-isomer



Absorption and emission spectra of 6-VIC

### General properties

|                     |  |
|---------------------|--|
| Appearance:         | white / off white solid  |
| Molecular weight:   | 1023.39  |
| CAS number:         | 1414265-81-8   |
| Molecular formula:  | C <sub>52</sub> H <sub>59</sub> Cl <sub>3</sub> N <sub>3</sub> O <sub>10</sub> P   |
| Quality control:    | NMR <sup>1</sup> H, <sup>31</sup> P 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. |

### Spectral properties

|  |        |
|--|--------|
| Excitation/absorption maximum, nm:         | 525    |
| ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> : | 103000 |
| Emission maximum, nm:                      | 546    |
| Fluorescence quantum yield:                | 0.53   |
| CF <sub>260</sub> :                        | 0.07   |
| CF <sub>280</sub> :                        | 0.07   |

### Oligo synthesis details

|                          |  |
|--------------------------|--|
| Diluent:                 | acetonitrile                                       |
| Coupling conditions:     | standard coupling, identical to normal nucleobases |
| Deprotection conditions: | standard deprotection conditions                   |