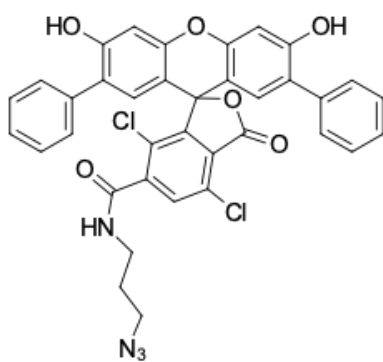


## SIMA azide, 6-isomer

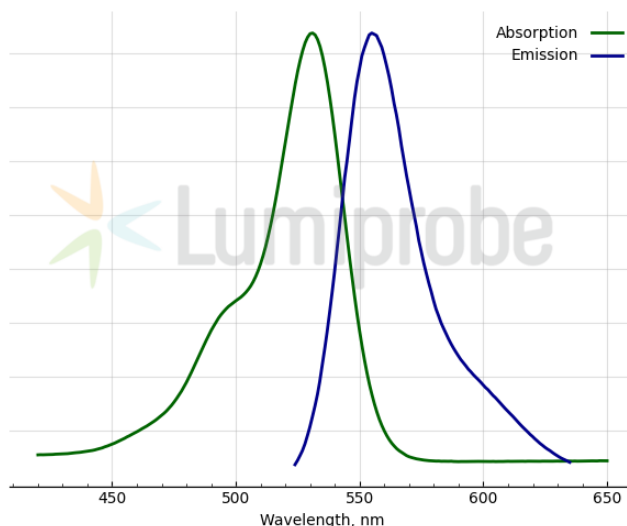
<http://www.lumiprobe.com/p/sima-azide-6>

SIMA (dichloro-diphenyl-fluorescein) is a dye with spectral properties similar to HEX but with a higher quantum yield.

SIMA azide is used to produce fluorescently labeled primers and hybridization probes for quantitative PCR. Oligonucleotides with a SIMA label can be easily generated via azide-alkyne cycloaddition between SIMA azide and alkyne-containing oligonucleotide.



**Structure of SIMA azide, 6-isomer**



**Absorption and emission spectra of SIMA**

### General properties

Appearance:	orange powder
Molecular weight:	679.52
Molecular formula:	C <sub>36</sub> H <sub>24</sub> Cl <sub>2</sub> N <sub>4</sub> O <sub>6</sub>
Solubility:	good in DMSO, DMF
Quality control:	NMR <sup>1</sup> H 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:	531
ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> :	92300
Emission maximum, nm:	555
Fluorescence quantum yield:	0.63
CF <sub>260</sub> :	0.57
CF <sub>280</sub> :	0.18