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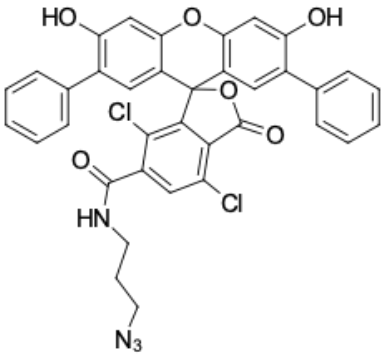
SIMA azide, 6-isomer

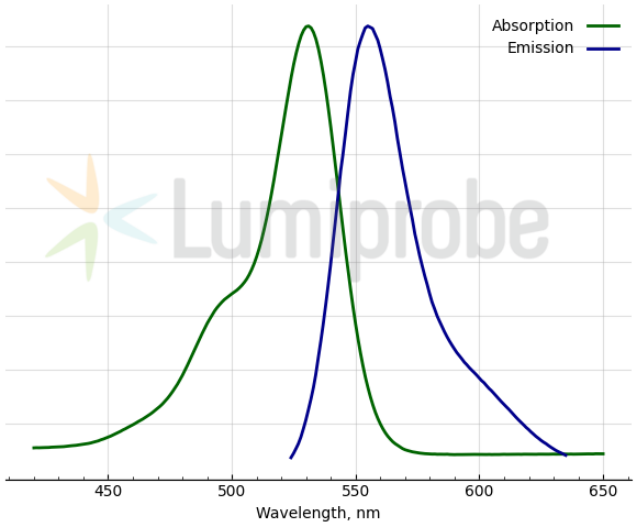
http://www.lumiprobe.com/p/sima-azide-6

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:	$C_{36}H_{24}Cl_2N_4O_6$
Solubility:	good in DMSO, DMF
Quality control:	NMR ^1H and HPLC-MS (95+%)
Storage conditions:	24 months after receival 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, $L \cdot mol^{-1} \cdot cm^{-1}$:	92300
Emission maximum, nm:	555
Fluorescence quantum yield:	0.63
CF_{260}:	0.57
CF_{280}:	0.18