

## DusQ® 21 CPG 500

<http://www.lumiprobe.com/p/dusq21-cpg-500>

DusQ® 21 is a quencher for the dyes in far red region of the spectrum. The dye is a xantheno derivative, unlike DusQ 1 or DusQ 2, that are azo dyes. It has a high extinction coefficient, and provides an outstanding quenching efficiency.

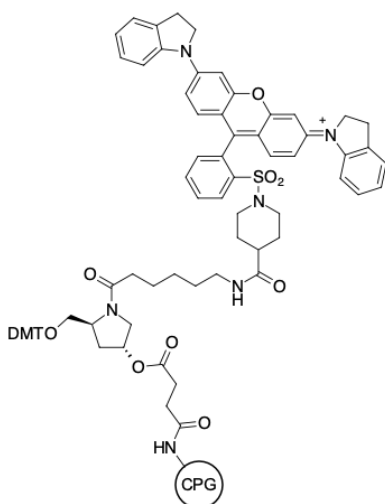
The controlled pore glass solid support allows to synthesize oligonucleotides carrying the dye moiety on 3'-terminus.

We recommend the use of ultramild, phenoxyacetyl protected monomers. As an alternative, post-synthetic labeling using NHS ester of DusQ 21 quencher can be used.

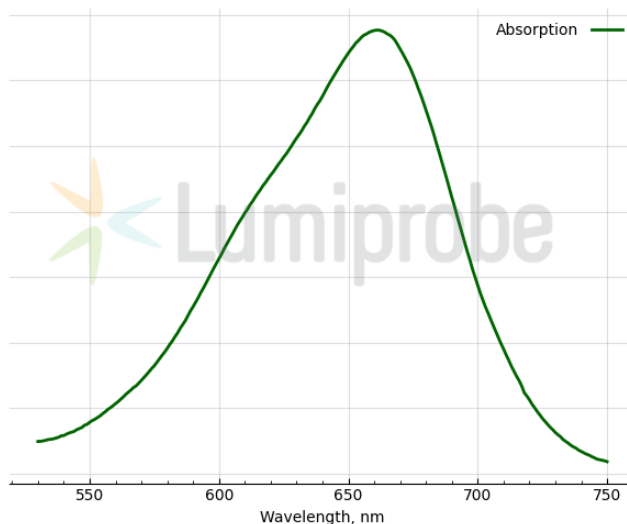
## Usage

**Coupling:** Standard conditions identical to normal nucleobases.

**Deprotection:** 2 hours at room temperature using concentrated ammonia or potassium carbonate  $K_2CO_3$  (50 mM solution in methanol).



**Structure of DusQ 21 CPG 500**



**Absorption spectrum of DusQ 21**

### General properties

Appearance:	dark blue beads
Quality control:	$^1H$ NMR of bound reagent, coupling testing with HPLC-MS
Storage conditions:	24 months after receipt at $-20^\circ C$ in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate. Avoid prolonged exposure to light.
Legal statement:	This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.

### Spectral properties

Excitation/absorption maximum, nm:	656
$\epsilon$ , $L \cdot mol^{-1} \cdot cm^{-1}$ :	72800

### Oligo synthesis details

Pore size, Å:	500
Typical loading, umol/g:	50–80