

## DusQ 1 CPG 500

<http://www.lumiprobe.com/p/dusq-1-cpg>

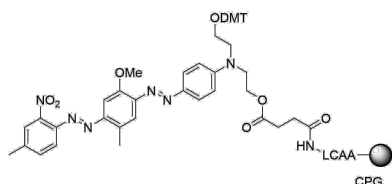
This modified support with a pore size of 500 Å is intended for the synthesis of oligonucleotides of up to 50 bases in length modified with non-fluorescent DusQ 1 quencher at the 3' end.

DusQ 1 dark quencher exhibits the strongest absorption within the range of 480 to 580 nm; its absorption maximum is at 534 nm. It can be used for combined quenching (a combination of static and dynamic quenching) of many fluorophores, including Biosearch Blue™, Marina Blue™, Edans, Bothell Blue, FAM™, JOE™, VIC™, R6G, HEX™, TET™, CAL Fluor™ Gold 540, and Yakima Yellow™. It can be used for the synthesis of hybridization probes such as TaqMan, Molecular Beacon, Scorpion.

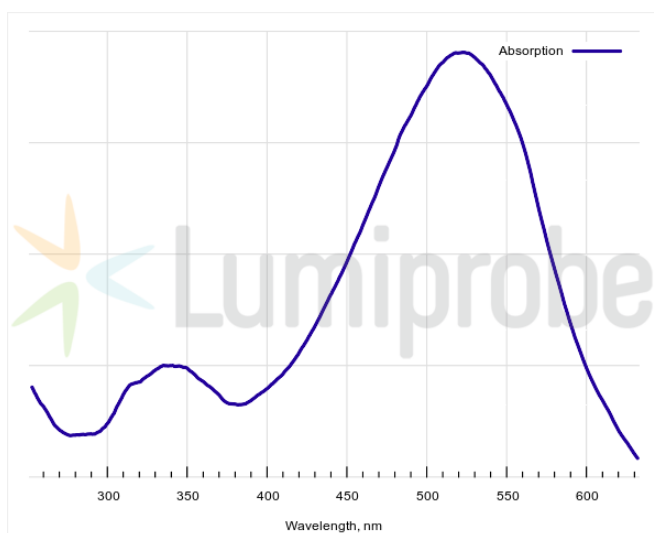
## Usage

Coupling: Standard conditions identical to normal nucleobases.

Deprotection: 2 hours at room temperature using concentrated ammonia or 10 min at 65 °C using AMA mixture, concentrated aqueous ammonia/40% methylamine (1:1). Deprotection conditions depend on oligonucleotide composition and nucleobase protecting groups, as well as additional modifications, if present.



**Structure of DusQ 1 CPG 500**



**Absorption spectrum of DusQ 1**

### General properties

Appearance:	purple beads
Quality control:	NMR <sup>1</sup> H and HPLC-MS (95%) of bound reagent, loading measurement, functional testing in oligo synthesis.
Storage conditions:	Storage: 24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light. Desiccate.

### Spectral properties

Excitation/absorption maximum, nm:	522
ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> :	27300
CF <sub>260</sub> :	0.17
CF <sub>280</sub> :	0.10

### Oligo synthesis details

Pore size, Å:	500
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Typical loading,  $\mu\text{mol/g}$ :

70–80