

## DusQ® 1 CPG 1000

<http://www.lumiprobe.com/p/bhq1-cpg-1000>

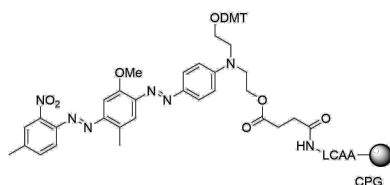
This support with a pore size of 1000 Å is intended for the automated synthesis of oligonucleotides of up to 120 bases in length modified with DusQ 1 dark quencher at the 3' end.

Non-fluorescent DusQ 1 quencher exhibits the strongest absorption within the range of 480 to 580 nm; its absorption maximum is at 534 nm. It is suitable for 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™ and Yakima Yellow™. It can be used for the synthesis of hybridization probes such as TaqMan, Molecular Beacon, Scorpion.

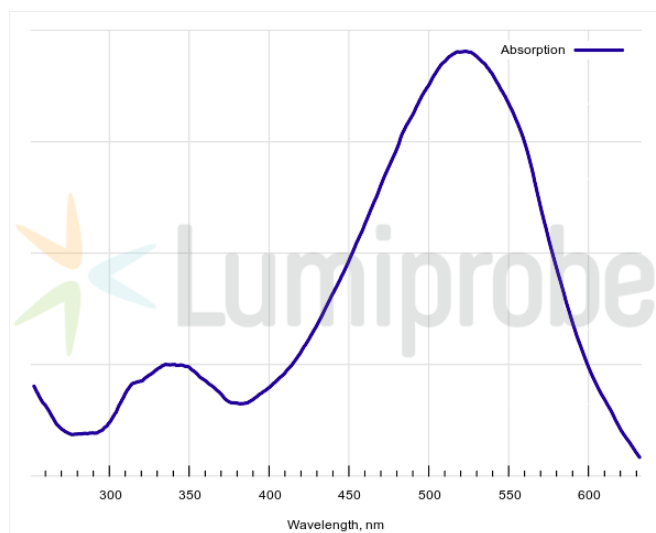
## Usage

**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 1000**



**Absorption spectrum of DusQ 1**

### General properties

Appearance:	red 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.
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:	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: 1000

Typical loading, umol/g: 30–50