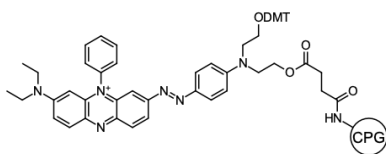


DusQ 3 CPG 500

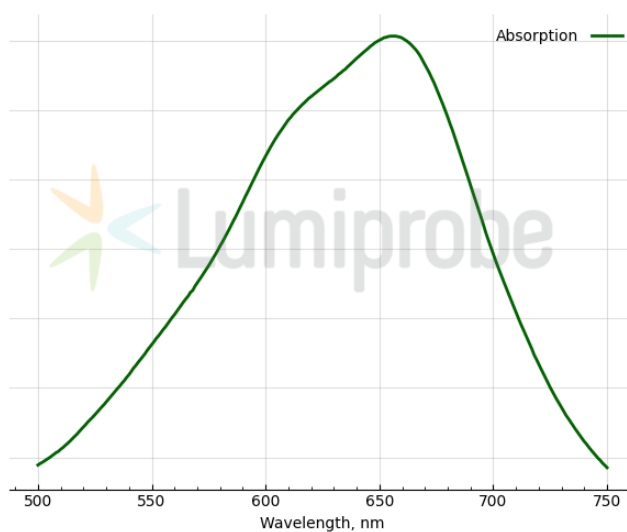
<http://www.lumiprobe.com/p/dusq3-cpg-500>

DusQ 3 is a dark quencher for far red and near infrared fluorophores, especially suitable for [Cyanine5.5](#).

The dye can be attached to 3'-terminus of oligonucleotides by means of automated solid phase synthesis using this support. The dye is sensitive to nucleophilic reagents, and therefore must be carefully deprotected. We recommend the use of ultramild, phenoxyacetyl protected monomers. As an alternative, post-synthetic labeling using NHS ester of the quencher can be used.



Structure of DusQ 3 CPG 500



Absorption spectrum of DusQ 3

General properties

| | |
|---------------------|--|
| Appearance: | dark blue beads |
| Quality control: | ¹ H NMR of bound reagent, coupling testing with HPLC-MS |
| 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: | 657 |
| ϵ , L·mol ⁻¹ ·cm ⁻¹ : | 45500 |

Oligo synthesis details

| | |
|--------------------------------------|---|
| Pore size, Å: | 500 |
| Typical loading, $\mu\text{mol/g}$: | 50-80 |
| Coupling conditions: | standard, ultramild phosphoramidites |
| Cleavage conditions: | 2 h / rt, 30% aq. ammonia (ultramild protective groups) |