

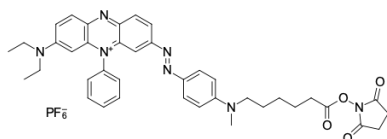
## DusQ 3 NHS ester

<http://www.lumiprobe.com/p/bhq3-nhs-ester>

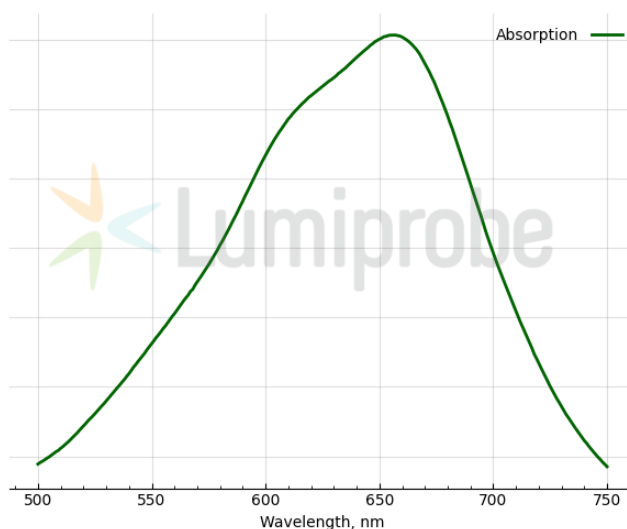
DusQ 3 NHS ester is a dark, far-red nonfluorescent DusQ 3 derivative for labeling with the primary amines of proteins, modified oligonucleotides. The labeling with covalent amide bond occurs most efficiently at pH 7-9.

DusQ 3 is used as an acceptor for preparation of fluorogenic dual-labeled probes, for qPCR, sequencing and other fluorescence-quenched system applications.

Due to quenching range characterised as 620-730 nm DusQ 3 is useful as an acceptor in fluorescence resonance energy transfer (FRET) combined with far-red to near-IR emitting dyes such as [Cyanine5](#), [Cyanine5.5](#), [AF 647](#).



**Structure of DusQ 3 NHS ester**



**Absorption spectrum of DusQ 3**

### General properties

Appearance:	dark powder
Molecular weight:	817.77
Molecular formula:	C <sub>39</sub> H <sub>42</sub> N <sub>7</sub> O <sub>4</sub>
Solubility:	good in DMF, DMSO
Quality control:	NMR <sup>1</sup> H and HPLC-MS (95+%)
Storage conditions:	12 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 <sup>-1</sup> ·cm <sup>-1</sup> :	45500