

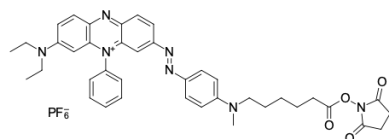
## DusQ® 3 NHS ester

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

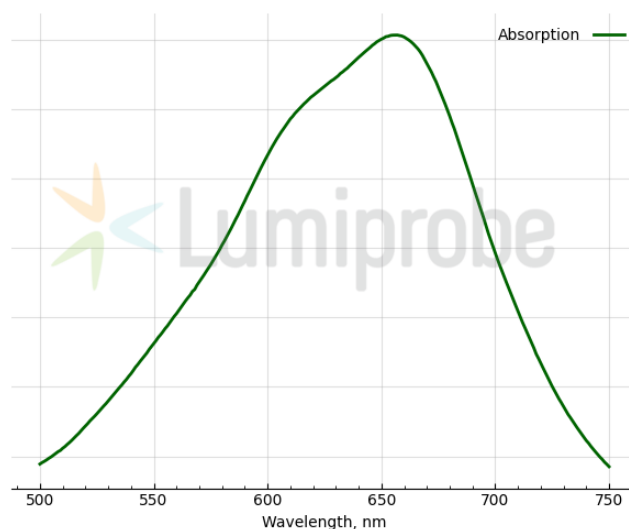
DusQ® 3 NHS ester is a dark, far-red nonfluorescent DusQ 3 derivative for labeling with the primary amines of proteins, modified oligonucleotides. The labeling with covalent amide bond occurs most efficiently at pH 7-9.

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.
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:	657
ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> :	45500