

## UGQuencher-1 NHS ester [equivalent to BHQ 1 NHS ester]

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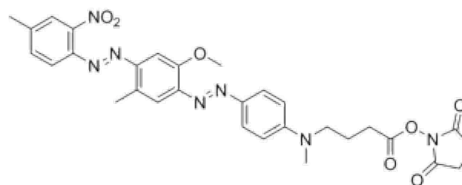
### Description

UGQuencher-1 NHS ester, which is functionally equivalent to BHQ 1 NHS ester, is a dark quencher with a polyaromatic-azo backbone that ensures no intrinsic fluorescence. Its broad and intense absorption range (480–580 nm) makes it highly effective for quenching in fluorescence-based assays, particularly in qPCR probes and FRET applications. It pairs exceptionally well with green to yellow-emitting fluorophores, including FAM, TET, HEX, JOE, Oregon Green®, Alexa Fluor® 488, and DyLight® 488.

The NHS ester (or succinimidyl ester) group is a widely used amine-reactive moiety, enabling covalent attachment to primary amines found in proteins (e.g., lysine residues), amine-modified oligonucleotides, and other amine-containing molecules. Labeling is most efficient at a slightly alkaline pH (7–9), resulting in the formation of stable amide bonds. Due to its versatility and reliability, UGQuencher-1 NHS ester is a top choice for creating fluorescence-quenched probes and biomolecular conjugates.

### Chemical Properties

CAS number	916753-61-2
Formula	C <sub>30</sub> H <sub>31</sub> N <sub>7</sub> O <sub>7</sub>
Molecular Weight	601.61
Purity	≥95%



### Storage

Upon receipt, store at -20°C in the dark. Protect from light and moisture. When stored as indicated, UGQuencher-1 NHS ester is stable for 3 years.

This product is for Research Use Only. Not for Human or Veterinary or Therapeutic Use

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