

Product Data Sheet

Date of Issue: 8 Oct 2021

1. Product Information

- Product Name : qFlamma® Black01 Maleimide
- Catalog Number : QWM1001
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Green Solid
- Storage Conditions : Protect from Light at -20 °C

2. Additional Information

- Fluorophore Label : Quencher
- Reactive Group : Maleimide
- Reactive Toward : -SH
- Molecular Formula : $C_{39}H_{37}N_7O_{11}S_2$
- Molecular Weight : 477 g/mol
- Excitation $_{Max}$: 484 ± 3 nm
- Extinction Coefficient : $\geq 19,000$ /cm·M

3. Description

qFlamma® Black01 Maleimide is a thiol reactive universal dark quencher that the range of absorption covers from 400 to 800 nm with no native fluorescence. Black01 quencher displays high absorption coefficient, superb stability and aqueous solubility. Maleimides selectively label thiols of probes, peptide or protein via 1,4-addition pathway, without interacting with amines, to form thioether linkage. Maleimides apparently do not react with methionine, histidine or tyrosine, but they might react with primary amines under strong basic environment. We offer qFlamma® Black01 maleimide as a universal dark quencher in the construction of a variety of hybridization and custom-synthesized activatable probes for multiplexed bio-analysis, PCR, nucleic acid hybridization, etc.