

Product Data Sheet

Date of Issue: 8 Oct 2021

1. Product Information

- Product Name : qFlamma® Black01 Carboxylic acid
- Catalog Number : QWC1001
- Packing Unit : 1mg / 5mg / 25 mg
- Appearance : Green Solid
- Storage Conditions : Protect from Light at 4 °C

2. Additional Information

- Fluorophore Label : Quencher
- Reactive Group : Carboxylic acid
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Formula : $C_{33}H_{31}N_5O_{10}S_2$
- Molecular Weight : 481 g/mol
- Excitation M_{max} : 484 ± 3 nm
- Extinction Coefficient : $\geq 12,000$ /cm·M

3. Description

Because qFlamma® Black01 Carboxylic acid developed by advanced manufacturing technology of BioActs has a wide range of quench that is 400 ~ 800 nm, It can combine with any fluorescent dyes in Dual labeled probe. In any combination with (in dual labeled probe (Dual labeled probe) it can emit its features. Dual labeled probe is a combination of Fluorescent dye and Quencher based on the principle of Fluorescence resonance energy transfer (FRET). In general, it is labeled on nucleic acid, peptide or nanoparticles and utilized in areas such as qPCR, measurement of enzyme activity. qFlamma® Black01 Carboxylic acid can induce amide bond with amine through appropriate catalytic reaction.