

# Product Data Sheet

Date of Issue: 22 Feb 2019

## 1. Product Information

- Product Name : FAM Maleimide
- Catalog Number : CWM1003
- Packing Unit : 25 mg
- Appearance : Yellow Solid
- Storage Conditions : Protect from Light at -20 °C

## 2. Additional Information

- Fluorophore Label : FAM
- Reactive Group : Maleimide
- Reactive Toward : Thiol
- Molecular Formula :  $C_{28}H_{24}N_2O_8$
- Molecular Weight : 500 g/mol
- Excitation  $_{Max}$  :  $494 \pm 3$  nm
- Emission  $_{Max}$  :  $522 \pm 4$  nm
- Extinction Coefficient :  $\geq 59,000$  /cm·M

## 3. Description

FAM Maleimide is a thiol reactive bright green dye used to generate a stable fluorescence signal in bioimaging. The maxima of Ex/Em values are at 494/522 nm, similar to that of Alexa 488 and Cy2. FAM might be excited using 488 nm laser line and displays good optical property. Maleimides selectively label thiols of cysteine residue 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 FAM maleimide for labeling of thiols on antibodies, peptides, proteins and nucleotide.