

Product Data Sheet

Date of Issue: 7 Oct 2021

1. Product Information

• Product Name : Flamma® 774 Maleimide

· Catalog Number: PWM1515

• Packing Unit: 1 mg / 5 mg / 25 mg

· Appearance : Green Solid

• Storage Conditions: Protect from Light at -20 °C

2. Additional Information

• Fluorophore Label : Flamma® 774

· Reactive Group: Maleimide

· Reactive Toward: Thiol

· Molecular Weight: 1051.19 g/mol

• Excitation $_{\text{Max}}$: 774 ± 3 nm

• Emission $_{\text{Max}}$: 800 ± 4 nm

• Extinction Coefficient : $\geq 182,000 / \text{cm} \cdot \text{M}$

3. Description

Flamma® Fluors 774 Maleimide is a thiol reactive near infrared (NIR) fluorescent dye that used to generate a stable fluorescence signal in bioimaging The maxima of Ex/Em values are at 774/800 nm, similar to that of IRDye 800, Cy7.5 and CF770. Flamma 774 might be excited using 750 nm laser line or dye-pumped laser excitation and the emission occurs at NIR region. Flamma Fluors 774 is ideal for protein, antibody and nucleic acid labeling for in vitro imaging and other fluorescence detection methods. 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 Flamma Fluors 774 Maleimide for labeling of antibodies, peptides, proteins, ligands and in vivo NIR imaging.