

# Product Data Sheet

Date of Issue: 7 Oct 2021

## 1. Product Information

- Product Name : Flamma® 552 Thiol
- Catalog Number : CWT1058
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Red Solid
- Storage Conditions : Protect from Light at -20 °C

## 2. Additional Information

- Fluorophore Label : Flamma® 552
- Reactive Group : Thiol
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Formula :  $C_{36}H_{49}N_3O_7S_3$
- Molecular Weight : 731.99 g/mol
- Excitation<sub>Max</sub> :  $550 \pm 3$  nm
- Emission<sub>Max</sub> :  $564 \pm 4$  nm
- Extinction Coefficient :  $\geq 115,000$  /cm·M

## 3. Description

Flamma® Fluors 552 Thiol is inactive form of bright yellow fluorescent dye induced from cyanine structure and used to generate a stable fluorescence signal in bioimaging. The thiol is attached to Flamma 552 fluorophore through a spacer. The maxima of Ex/Em values are at 550/565 nm, similar to that of Alexa 555, DyLight 549, ATTO 550 and Cy3. Flamma 552 might be excited using 532, 543, 546 or 555 nm laser lines and displays excellent optical property. Flamma® Fluors 552 thiol can be labeled to biomolecules through a disulfide bond formation with thiol of cysteine residue or can be utilized as a reference standard for dye-conjugates.