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# *Product information:* SiR-NHS (SC003)

Amine reactive SiR fluorophore for custom conjugate synthesis

## Introduction

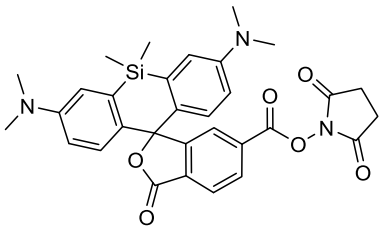
SiR-NHS is the *N*-hydroxysuccinimidyl ester (NHS) form of the fluorophore silicon rhodamine (SiR)[1)]. Sir-NHS reacts readily with primary and secondary amines allowing preparing custom SiR conjugates via amide bond formation. Small molecules, peptides and oligonucleotides bearing an amino group or proteins can be conjugated to SiR-NHS. The key features of SiR-NHS are i) far-red absorption and emission wavelengths, ii) high extinction coefficient, iii) high photostability and iv) compatibility with superresolution microscopy (STED & SIM)[2)]. The combination of those properties put SiR-NHS at the leading edge of excellence.

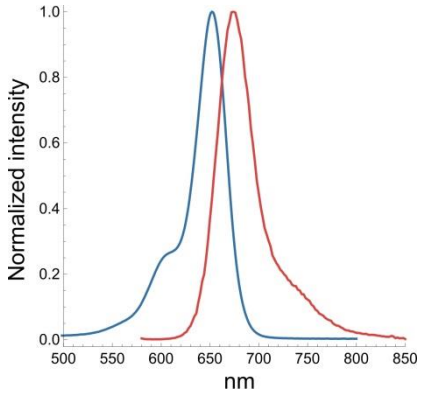
## Storage & Handling

Store the compound below -20°C upon receipt. Prepare solutions of the compound using anhydrous DMSO. Keep solutions of the compound below -20°C after use. Vials should be allowed to warm to room temperature before opening. When stored properly, the compound should be stable for several months. Note: DMSO solutions should be handled with particular caution as DMSO is known to facilitate the entry of organic molecules into tissues. Dispose of these reagents in compliance with all pertaining local regulations.

## Physical properties

| | |
|---|---|
| $\lambda_{Abs}$ | 652 nm |
| $\lambda_{Em}$ | 674 nm |
| $\varepsilon_{max}$ | $1.0 \cdot 10^5$ $mol^{-1} \cdot cm^{-1}$ |
| MW | 569.7 g/mol |
| MF | $C_{31}H_{31}N_3O_6Si$ |




## References:

**1.** A near-infrared fluorophore for live-cell super-resolution microscopy of cellular proteins G. Lukinavičius et al., *Nature Chemistry*, 5, 132–139 (2013).

**2.** Fluorogenic probes for live-cell imaging of the cytoskeleton, G. Lukinavičius et al., *Nature Methods*, 11, 731–733 (2014).

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