

Product information: SiR-COOH (SC004)

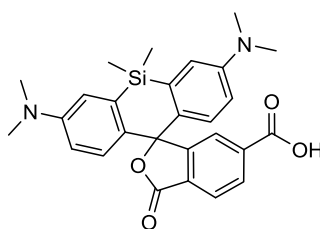
Free SiR fluorophore for custom conjugate synthesis

Introduction

SiR-COOH is the 6-carboxylic acid form of the fluorophore silicon rhodamine (SiR)¹. SiR-COOH allows preparing custom SiR conjugates through coupling to the 6-carboxylic acid group. Small molecules, peptides, proteins or oligonucleotides can be conjugated to SiR-COOH. The key features of SiR-COOH 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-COOH at the leading edge of excellence.

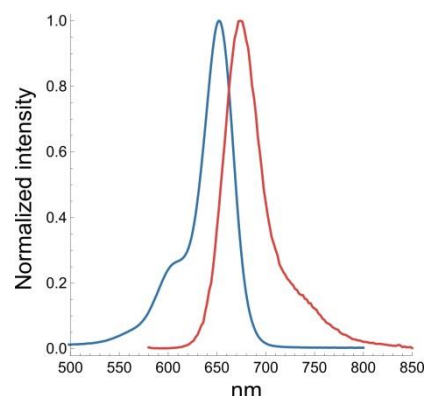
Physical properties

λ_{Abs}	652 nm
λ_{Em}	674 nm
ϵ_{max}	$1.0 \cdot 10^5 \text{ mol}^{-1} \cdot \text{cm}^{-1}$
MW	472.6 g/mol
MF	$\text{C}_{27}\text{H}_{28}\text{N}_2\text{O}_4\text{Si}$



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.



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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