

## Product information: SiR-COOH (SC004)

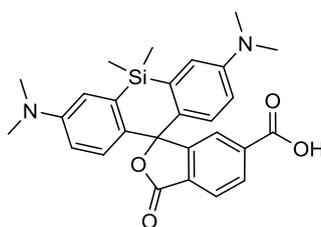
Free SiR fluorophore for custom conjugate synthesis

### Introduction

SiR-COOH is the 6-carboxylic acid form of the fluorophore silicon rhodamine (SiR)<sup>1</sup>. 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)<sup>2</sup>. The combination of those properties put SiR-COOH at the leading edge of excellence.

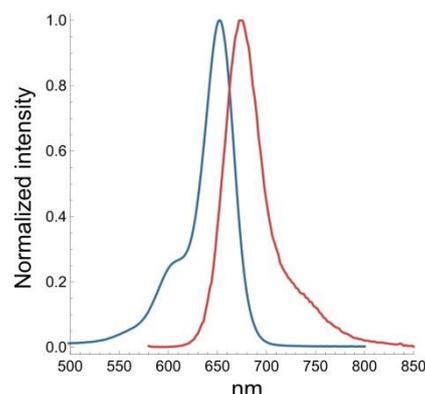
### Physical properties

$\lambda_{Abs}$	652 nm
$\lambda_{Em}$	674 nm
$\epsilon_{max}$	$1.0 \cdot 10^5 \text{ mol}^{-1} \cdot \text{cm}^{-1}$
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  $-20^\circ\text{C}$  upon receipt. Prepare solutions of the compound using anhydrous DMSO. Keep solutions of the compound below  $-20^\circ\text{C}$  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).

Spirochrome products are high-quality reagents and materials intended for research purposes only. These products must be used by, or directly under the supervision of a technically qualified individual experienced in handling potentially hazardous chemicals. Please read the Material Safety Data Sheet provided for each product; other regulatory considerations may apply. Spirochrome products and product applications are covered by patents and patents pending.

**Limited Use Label License:** For research use only. Not intended for any animal or human therapeutic or diagnostic use. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The buyer cannot sell or otherwise transfer (a) this product (b) its components or (c) materials made using this product or its components to a third party or otherwise use this product or its components or materials made using this product or its components for Commercial Purposes. The buyer may transfer information or materials made through the use of this product to a scientific collaborator, provided that such transfer is not for any Commercial Purpose, and that such collaborator agrees in writing (a) to not transfer such materials to any third party, and (b) to use such transferred materials and/or information solely for research and not for Commercial Purposes. Commercial Purposes means any activity by a party for consideration and may include, but is not limited to: (1) use of the product or its components in manufacturing; (2) use of the product or its components to provide a service, information, or data; (3) use of the product or its components for therapeutic, diagnostic or prophylactic purposes; or (4) resale of the product or its components, whether or not such product or its components are resold for use in research. Spirochrome will not assert a claim against the buyer of infringement of the above patents based upon the manufacture, use or sale of a therapeutic, clinical diagnostic, vaccine or prophylactic product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. If the purchaser is not willing to accept the limitations of this limited use statement, Spirochrome is willing to accept return of the unused product with a full refund. For information on purchasing a license to this product for purposes other than research, contact Spirochrome: Spirochrome AG, Postfach 213, 8620 Stein am Rhein, Switzerland, Email: info@spirochrome.com