

Product information: SiR-azide (SC009)

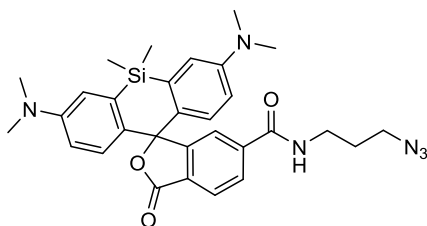
Clickable SiR derivative for custom conjugate synthesis.

Introduction

SiR-azide is the 3-azidopropyl derivative of the fluorophore silicon rhodamine (SiR)¹. SiR-azide reacts with terminal alkyne derivatives in the presence of copper (I) to form 1,2,3-triazoles linkage. It can also react with strained alkynes such as DIFO or DIBO without the need of copper. Small molecules, peptides, oligonucleotides or proteins bearing the appropriate alkyne can be conjugated to SiR-azide. The key features of SiR-azide are i) far-red absorption and emission wavelengths, ii) high extinction coefficient, iii) high photostability, iv) compatibility with superresolution microscopy (STED & SIM). The combination of those properties put SiR-azide at the leading edge of excellence.

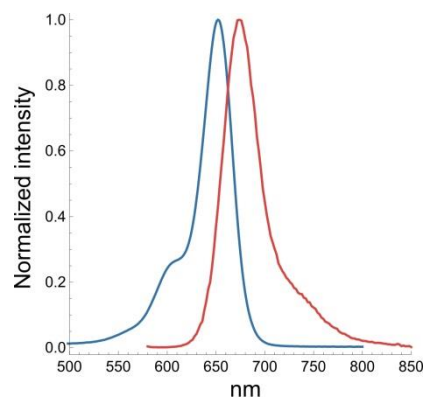
Physical properties

λ_{Abs}	652 nm
λ_{Em}	674 nm
ϵ_{max}	$1.0 \cdot 10^5 \text{ mol}^{-1} \cdot \text{cm}^{-1}$
MW	554.7 g/mol
MF	$\text{C}_{30}\text{H}_{34}\text{N}_6\text{O}_3\text{Si}$



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).

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