



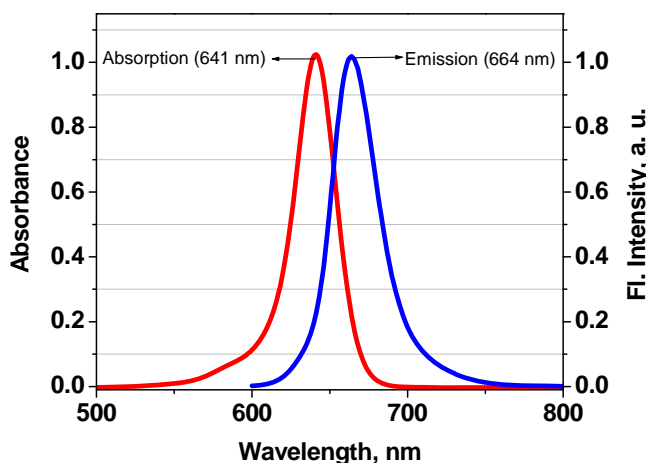
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Catalog Number: SR-1004

Product Name: SRfluor® maleimide

Product Description: A far-red emitting dye (Figure 1), belonging to the squaraine rotaxane family of dyes, which bears a maleimide functionality.

Figure 1: Spectra of SRfluor®-maleimide (6 μ M in ethanol) (absorption maxima = 641 nm; emission maxima = 664 nm)



Product size: 1.00 mg

Molecular Weight: 1231

Product Purity: > 95% by HPLC

Extinction Coefficient (ethanol): 213530 cm⁻¹M⁻¹ (641 nm).

Storage/Stability: Solid as well as stock solutions in DMF/DMSO should be stored in the dark at 0-4°C and are found to be stable for at least 1 month.

Applications:

SRfluor®-dyes has been found to be 5-20X brighter compared with cyanines, Alexa® and ATTO® dyes and also to have improved chemical and photochemical stability (1-3).

Additional Information:

- 1mg of SRfluor®-maleimide can be dissolved in 0.81 mL of DMF/DMSO to provide a 1mM stock solution.

- SRfluor® maleimide can be efficiently excited with either 633nm or 647nm laser lines and detected using a standard filter set-up for Cy5.

References:

- (1) Johnson, J. R.; Fu, N.; Arunkumar, E.; Leevy, W. M.; Gammon, S. T.; Piwinica-Worms, D.; Smith, B. D. [Squaraine Rotaxanes: Superior Substitutes for Cy-5 in Molecular Probes for Near-Infrared Fluorescence Cell Imaging](#) *Angew. Chem. Int. Ed.* **2007**, *46*, 5528.
- (2) Arunkumar, E.; Fu, N.; Smith, B. D. [Squaraine-Derived Rotaxanes: Highly Stable, Fluorescent Near-IR Dyes](#). *Chem.-Eur. J.* **2006**, *12*, 4684.
- (3) Arunkumar, E.; Forbes, C. C.; Noll, B. C.; Smith B. D. [Squaraine-Derived Rotaxanes: Sterically Protected Fluorescent Near-IR Dyes](#) *J. Am. Chem. Soc.* **2005**, *127*, 3288.

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