

## SR101 Astroglia Stain

<http://hk.lumiprobe.com/p/sulforhodamine-101>

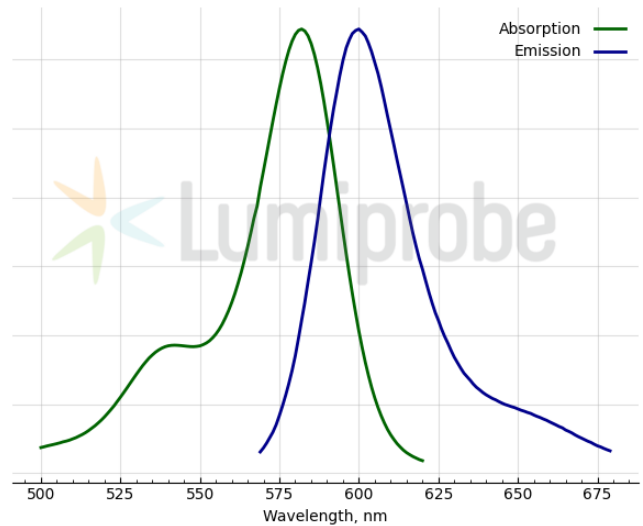
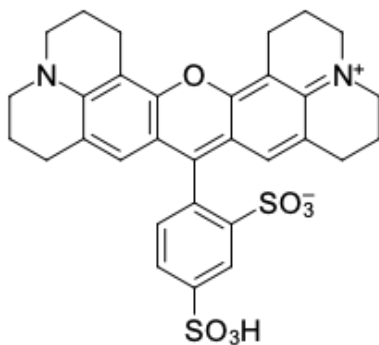
Sulforhodamine 101 (SR101) is a water-soluble, photostable fluorescent dye widely used for labeling live astrocytes.

In live-cell imaging, extracellular application of SR101 results in its preferential uptake by astrocytes, facilitating clear visualization of their morphology and network integrity without significant staining of neurons. It makes SR101 an indispensable tool for *in vivo* studies of glial function and cytoarchitecture<sup>[1]</sup>.

SR101 labels astrocytes primarily via an active transport mechanism involving the specific cellular transporter OATP1C1, which is preferentially expressed in astroglial cells. OATP1C1 selectivity is not absolute and can be influenced by several factors<sup>[2]</sup>. Also, SR101 can spread from astrocytes to mature oligodendrocytes via gap junctions<sup>[3]</sup>.

SR101 can also be used as an effective fluorescent tracer to investigate vascular perfusion, gap junction permeability, and fluid dynamics, thanks to its high hydrophilicity and bright emission. Furthermore, its structural similarity to Rose Bengal allows it to function as an efficient photosensitizer in photodynamic therapy research.

<sup>[1]</sup> Nat. Methods. 2004. 1(1):31-37; <sup>[2]</sup> Brain Struct. Funct. 2015. 220:193-203; <sup>[3]</sup> Nat. Methods. 2014. 11(11):1081-1082.



外观:

分子量: 606.72

CAS 编号: 60311-02-6

分子式: C<sub>31</sub>H<sub>30</sub>N<sub>2</sub>O<sub>7</sub>S<sub>2</sub>

质量控制: NMR <sup>1</sup>H和HPLC-MS (95+%)

储存条件:

法律声明: 本產品僅供研究目的提供和銷售。本產品並未經過食品、藥品、醫療器械、化妝品等領域的安全性和效力測試，且未經明示或暗示授權用於其他任何用途，包括但不限於體外診斷、人類或動物用途，以及商業用途。

激发/吸收极大值, 纳米: 582

发射极大值, 纳米: 600

荧光量子产率: 0.79