

## LUCS® 5, far-red fluorescent nucleic acid stain

<http://hk.lumiprobe.com/p/lucs5-nucleic-acid-stain-draq5>

LUCS® 5 (1,5-bis{[2-(di-methylamino) ethyl]amino}-4,8-dihydroxyanthracene-9,10-dione, DRAQ5®) is a cell-permeant far-red fluorescent DNA dye for live and fixed cell imaging and analysis.

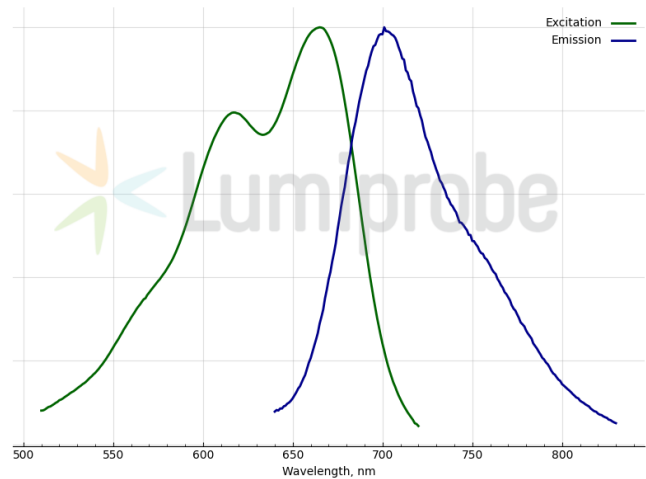
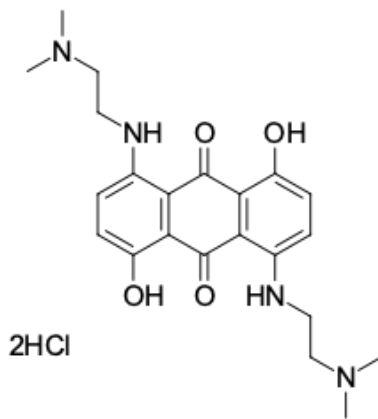
LUCS® 5 readily permeates the cell membranes and intercalates between A-T bases of double-strained DNA (dsDNA). The dye has a high affinity to dsDNA and shows negligible binding to RNA and mtDNA. LUCS® 5 does not exhibit a fluorescence enhancement on DNA binding; thus, the measured fluorescence is proportional and stoichiometric to the quantity of nuclear DNA content of the cell.

Due to its cell permeability, LUCS® 5 is useful for assessing DNA content and cell cycle but is not suitable for use as a viability dye. As with other cell-permeant DNA intercalating dyes, LUCS® 5 may inhibit cell division in long-term assays, so this effect should be tested before the experiment.

In microscopy and high-content screening, LUCS® 5 is useful as a nuclear counterstain for both live and fixed specimens. In flow cytometry, LUCS® 5 allows direct blood and bone marrow cell discrimination without preliminary red blood cell lysis, fixation, permeabilization, or RNase treatment.

LUCS® 5 has absorbance peaks at 600 nm and 646 nm and an emission peak at 697 nm (when intercalated into dsDNA). Thus, this dye is spectrally compatible with the most common labels, such as GFP, FITC, R-PE, or RFP. LUCS® 5 also has high photostability and demonstrates no photobleaching effect during imaging.

LUCS® 5 solution should be stored at 2-8 °C. Do NOT freeze the solution! LUCS® 5 may precipitate out of the solution when frozen. Re-dissolving it may not be easy.



外观: 藍紫色溶液

分子量: 485.41

CAS 编号: 252903-95-0

分子式: C<sub>22</sub>H<sub>30</sub>Cl<sub>2</sub>N<sub>4</sub>O<sub>4</sub>

IUPAC 名称: 1,5-bis{[2-(di-methylamino) ethyl]amino}-4, 8-dihydroxyanthracene-9,10-dione

溶解度: 水、二甲基亞砜

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

储存条件: 收到後 -20°C 避光保存 24 個月。運輸: 室溫最多可保存3週。乾燥。

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。

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