

## DAF-FM (4-amino-5-methylamino-2',7'-difluorofluorescein)

<http://cn.lumiprobe.com/p/diaminofluorescein-daf-fm>

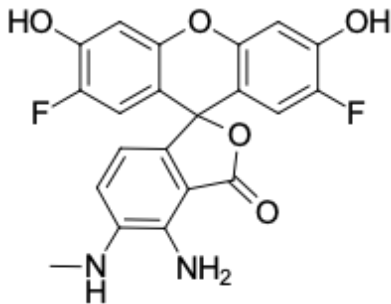
DAF-FM (4-amino-5-methylamino-2',7'-difluorofluorescein) is a cell-impermeant, fluorescent probe for detecting and quantifying low concentrations of nitric oxide (NO). DAF-FM does not need to be activated by cytosolic enzymes and is suitable to detect NO in extracellular matrix.

The fluorescence quantum yield of DAF-FM is  $\sim 0.005$ , but it increases about 160-fold to  $\sim 0.81$  after reacting with NO and forming a fluorescent benzotriazole (excitation/emission maxima at 495/515 nm).

The NO detection limit of DAF-FM ( $\sim 3$  nM) is more sensitive than that of DAF-2 ( $\sim 5$  nM). The fluorescence of the NO adduct of DAF-FM is independent of pH above pH 5.5. Moreover, the NO adduct of DAF-FM demonstrates a significantly enhanced photostability compared to that of DAF-2, ensuring reliable results and additional time for imaging.

DAF-FM should be dissolved in DMSO and then used to prepare a working solution. Buffers containing bovine serum albumin (BSA) or phenol red can affect the fluorescence and should be used cautiously.

The cell-permeant version of DAF FM — [DAF-FM DA](#) is also available.



外观: 黄色固体

分子量: 412.35

CAS 编号: 254109-20-1

分子式:  $C_{22}H_{14}F_2N_2O_5$

溶解度: 在甲醇、DMSO、DMF 和水中效果良好; 在水中效果有限; 在乙腈和二氯甲烷中效果较差

质量控制: NMR  $^1H$  和 HPLC-MS (90+%)

储存条件: 收到后在  $-20^\circ C$  黑暗条件下可保存 24 个月。运输: 室温下最多可保存 3 周。干燥。

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