**Lumiprobe Corporation**
201 International Circle，135号套房
马里兰州亨特瓦雷，21030
美国
电话：+1 888 973 6353
传真：+1 888 973 6354
电子邮件：order@lumiprobe.com

# 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 ~0.005, but it increases about 160-fold to ~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 (~3 nM) is more sensitive than that of DAF-2 (~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: | $C_{21}H_{14}F_2N_2O_5$ |
| 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°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。 |
| 法律声明: | 本产品仅供研究目的提供和销售。 本产品并未经过食品、药品、医疗器械、化妆品等领域的安全性和效力测试，且未经明示或暗示授权用于其他任何用途，包括但不限于体外诊断、人类或动物用途，以及商业用途 。 |