

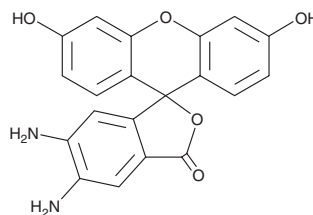
Product Information



DAF-2

Item No. 85160

Formal Name: 2-(3,6-dihydroxy-4,5-diamino-9H-xanthen-9-yl)-benzoic acid
Synonym: 4,5-Diaminofluorescein
MF: C₂₀H₁₄N₂O₅
FW: 362.3
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A solution in DMSO



Laboratory Procedures

For long term storage, we suggest that DAF-2 be stored as supplied at -20°C. It should be stable for at least one year.

DAF-2 is supplied as a solution in DMSO. We do not recommend changing the solvent, but when performing biological experiments further dilutions of the stock solution into aqueous buffers or isotonic saline should be made. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

DAF-2 is a sensitive fluorescent indicator commonly used for the detection of nitric oxide (NO).^{1,2} It reacts with NO in the presence of oxygen to yield the highly fluorescent triazolofluorescein (DAF-2T). Fluorescence is monitored using excitation and emission wavelengths of 485 and 538 nM, respectively.² At neutral pH the detection limit for NO is 2-5 nM.

References

1. Kojima, H., Sakurai, K., Kikuchi, K., *et al.* Development of a fluorescent indicator for nitric oxide based on the fluorescein chromophore. *Chem. Pharm. Bull.* **46**, 373-375 (1998).
2. Nakatsubo, N., Kojima, H., Kikuchi, K., *et al.* Direct evidence of nitric oxide production from bovine aortic endothelial cells using new fluorescence indicators: Diaminofluoresceins. *FEBS Lett.* **427**, 263-266 (1998).

Related Products

DAN-1 EE - Item No. 85070 • DAN-1 - Item No. 85075 • DAF-2 diacetate - Item No. 85165

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WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery**.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

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Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy** located on our website and in our catalog.

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