

## **DAF-FM** diacetate

Catalog number: 16298, 16299

Unit size: 10x50 ug, 1 mg

## **Product Details**

Storage Conditions Freeze (<-15 °C), Minimize light exposure

Expiration Date 12 months upon receiving

## **Chemical Properties**

Appearance Solid

Molecular Weight 496.42

Soluble In DMSO

## **Applications**

DAF-FM diacetate is a more cell-permeable version of DAF-FM, a sensitive fluorescent indicator for the detection and bioimaging of nitric oxide (NO). Upon entry into cells, DAF-FM diacetate is hydrolyzed to the less cell-permeable DAF-FM by cellular esterases, thus preventing loss of signal due to leakage of DAF-FM diacetate from cells. In the presence of oxygen, DAF-FM reacts with NO to yield the highly fluorescent difluorotriazolofluorescein. The intracellular fluorescence (generated by DAF-FM diacetate) can be readily monitored using the standard FITC filter set. DAF-FM diacetate can be utilized in cells for a broad range of NO production, e.g., the small amounts of NO production (such as in endothelial cells) and large amounts of NO production (such as in macrophages). Compared with DAF-2 DA, DAF-FM diacetate is a much more sensitive and photo-stable fluorescent probe for detecting NO. In addition, DAF-FM is much less pH sensitive than DAF-2, essentially pH-independent in the physiological pH range.