

Product Name: Sulfidefluor 7 AM

Catalog No.: 4943

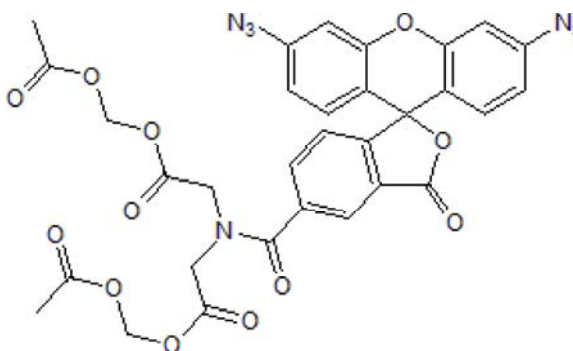
Batch No.: 2

CAS Number: 1416872-50-8

IUPAC Name: *N*-[2-[(Acetyloxy)methoxy]-2-oxoethyl]-*N*-[(3',6'-diazido-3-oxospiro[isobenzofuran-1(3*H*),9'-[9*H*]xanthen]-5-yl)carbonyl]glycine (acetyloxy)methyl ester

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₃₁ H ₂₃ N ₇ O ₁₂
Batch Molecular Weight:	685.55
Physical Appearance:	White solid
Solubility:	DMSO to 20 mM
Storage:	Store at -20°C
Batch Molecular Structure:	



2. ANALYTICAL DATA

TLC:	R _f = 0.73 (Ethyl acetate:Petroleum ether [3:2])
HPLC:	Shows 85.3% purity at 234 nm
¹H NMR:	Consistent with structure
Mass Spectrum:	Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Sulfidefluor 7 AM is reported to be a hydrogen sulphide (H₂S) fluorescent probe. Contains an acetoxymethyl ester, which enhances cell permeability and is hydrolyzed inside the cell to trap the probe. Used to visualize VEGF-induced H₂S production in human umbilical vein endothelial cells (HUVECS). Excitation wavelength ~ 495 nm; emission maximum ~ 520 nm.

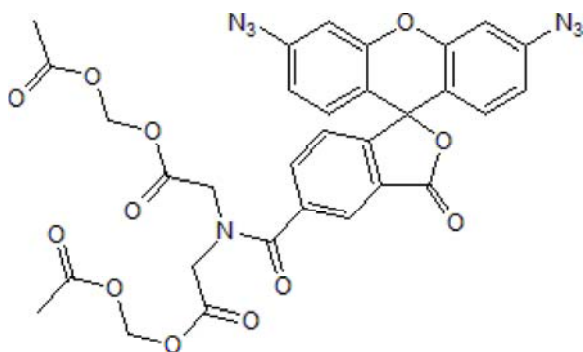
Physical and Chemical Properties:

Batch Molecular Formula: C₃₁H₂₃N₇O₁₂

Batch Molecular Weight: 685.55

Physical Appearance: White solid

Batch Molecular Structure:



Storage: Store at -20°C. This product is packaged under an inert atmosphere.

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMSO to 20 mM

This product may be used for research purposes only. It is not licensed for resale and may only be used by the buyer. This product may not be used and is not licensed for clinical assays, where the results of such assays are provided as a diagnostic service. If a diagnostic or therapeutic use is anticipated, then a license must be requested from the University of California. The availability of such diagnostic and therapeutic use license(s) cannot be guaranteed from the University of California. This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

Licensing Information:

Sold under license from the Regents of the University of California

References:

Lin *et al* (2013) Cell-trappable fluorescent probes for endogenous hydrogen sulfide signaling and imaging H₂O₂-dependent H₂S production. *Proc.Natl.Acad.Sci.USA.* **110** 7131. PMID: 23589874.

Lippert *et al* (2011) Reaction-based fluorescent probes for selective imaging of hydrogen sulfide in living cells. *J.Am.Chem.Soc.* **133** 10078. PMID: 21671682.

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