

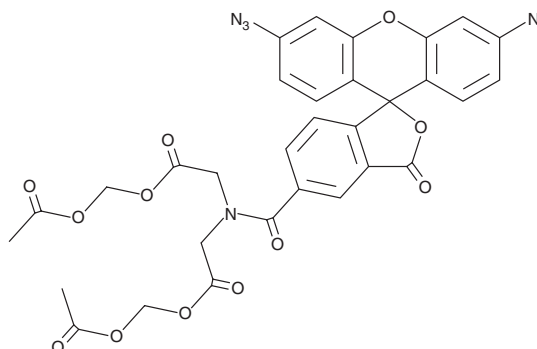
PRODUCT INFORMATION



SF7-AM

Item No. 14623

CAS Registry No.: 1416872-50-8
Formal Name: N-[2-[(acetyloxy)methoxy]-2-oxoethyl]-N-[[3',6'-diazido-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]-glycine, (acetyloxy)methyl ester
Synonym: Sulfidefluor-7 acetoxymethyl ester
MF: C₃₁H₂₃N₇O₁₂
FW: 685.6
Purity: ≥95%
UV/Vis.: λ_{max}: 234 nm
Ex./Em. Max: 498/526 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

SF7-AM is supplied as a crystalline solid. A stock solution may be made by dissolving the SF7-AM in the solvent of choice, which should be purged with an inert gas. SF7-AM is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of SF7-AM in these solvents is approximately 5 and 10 mg/ml, respectively.

SF7-AM is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SF7-AM should first be dissolved in DMF and then diluted with the aqueous buffer of choice. SF7-AM has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

SF7-AM is a cell-trappable fluorogenic probe for the detection of hydrogen sulfide (H₂S).¹ Following entry into cells, cleavage of the acetoxymethyl ester groups by intracellular esterases results in an anionic charge, trapping the probe inside the cells.² Reaction of the azide moieties with H₂S in buffers or live cells leads to generation of carboxamide rhodamine 110, which displays excitation/emission maxima of 498/526 nm, respectively.¹

References

1. Lin, V.S., Lippert, A.R., and Chang, C.J. Cell-trappable fluorescent probes for endogenous hydrogen sulfide signaling and imaging H₂O₂-dependent H₂S production. *Proc. Natl. Acad. Sci. USA* **110**(18), 7131-7135 (2013).
2. Lippert, A.R. Designing reaction-based fluorescent probes for selective hydrogen sulfide detection. *J. Inorg. Biochem.* **133**, 136-142 (2014).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/08/2019

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM