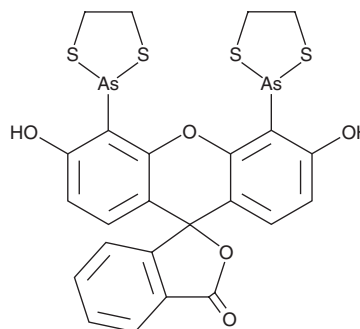


PRODUCT INFORMATION



FIAsH-EDT₂ Item No. 20704

CAS Registry No.: 212118-77-9
Formal Name: 4',5'-bis(1,3,2-dithiarsolan-2-yl)-3',6'-dihydroxy-spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one
Synonyms: Fluorescein Arsenical Helix Binder, Lumio Green
MF: C₂₄H₁₈As₂O₅S₄
FW: 664.5
Purity: ≥98%
UV/Vis.: λ_{max}: 515 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

FIAsH-EDT₂ is supplied as a crystalline solid. A stock solution may be made by dissolving the FIAsH-EDT₂ in the solvent of choice. FIAsH-EDT₂ is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of FIAsH-EDT₂ in these solvents is approximately 20 and 15 mg/ml, respectively.

FIAsH-EDT₂ is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, FIAsH-EDT₂ should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. FIAsH-EDT₂ has a solubility of approximately 0.09 mg/ml in a 1:10 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

FIAsH-EDT₂ is a pro-fluorescent, membrane-permeable biarsenical compound that binds covalently to a tetracysteine sequence (CCPGCC), which is engineered into target proteins.^{1,2} It binds proteins that have the CCPGCC tag almost immediately after translation.² FIAsH-EDT₂ is commonly used to study protein trafficking, folding, and interactions in living cells or cell lysates.²⁻⁴ This green-emitting fluorophore is excited at 508 nm, with emission at 528 nm.⁴

References

1. Griffin, B.A., Adams, S.R., and Tsien, R.Y. Specific covalent labeling of recombinant protein molecules inside live cells. *Science* **287**(5374), 269-272 (1998).
2. Rudner, L., Nydegger, S., Coren, L.V., et al. Dynamic fluorescent imaging of human immunodeficiency virus type 1 gag in live cells by biarsenical labeling. *J. Virol.* **79**(7), 4055-4065 (2005).
3. Luedtke, N.W., Dexter, R.J., Fried, D.B., et al. Surveying polypeptide and protein domain conformation and association with FIAsH and ReAsH. *Nat. Chem. Biol.* **3**(12), 779-784 (2007).
4. Perdios, L., Bunney, T.D., Warren, S.C., et al. Time-resolved FRET reports FGFR1 dimerization and formation of a complex with its effector PLCγ1. *Adv. Biol. Regul.* **60**, 6-13 (2016).

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

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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