

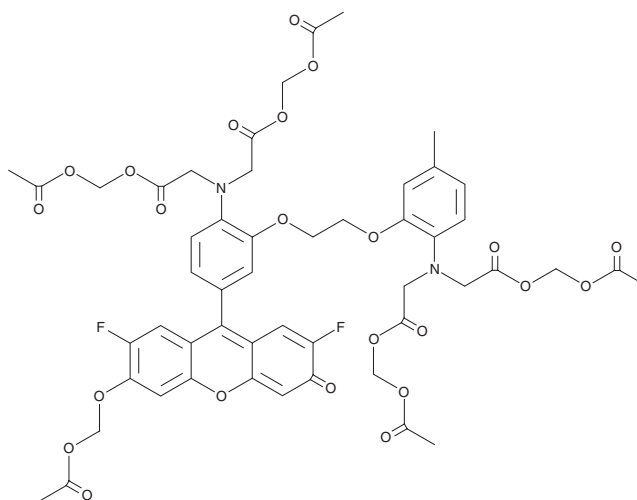
PRODUCT INFORMATION



Fluo-4 AM

Item No. 31143

CAS Registry No.: 273221-67-3
Formal Name: N-[4-[6-[(acetyloxy)methoxy]-2,7-difluoro-3-oxo-3H-xanthen-9-yl]-2-[2-[bis[2-[(acetyloxy)methoxy]-2-oxoethyl]amino]-5-methylphenoxy]ethoxy]phenyl]-N-[2-[(acetyloxy)methoxy]-2-oxoethyl]-glycine (acetyloxy)methyl ester
Synonym: Fluo-4 Acetoxymethyl ester
MF: C₅₁H₅₀F₂N₂O₂₃
FW: 1,096.9
Purity: ≥95%
Ex./Em. Max: 490/520 nm
Supplied as: A 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

Fluo-4 acetoxymethyl ester (Fluo-4 AM) is supplied as a solid. A stock solution may be made by dissolving the fluo-4 AM in the solvent of choice, which should be purged with an inert gas. Fluo-4 AM is soluble in methanol.

Description

Fluo-4 AM is a cell-permeable fluorescent calcium indicator.¹ It is cleaved by intracellular esterases to release Fluo-4, which binds to calcium with a K_d value of 345 nM and displays excitation/emission maxima of 490/520 nm, respectively. Fluo-4 AM has been used to measure intracellular calcium levels in live cells by fluorescent microscopy or flow cytometry.^{1,2}

References

1. Gee, K.R., Brown, K.A., Chen, W.N., *et al.* Chemical and physiological characterization of fluo-4 Ca²⁺ - indicator dyes. *Cell Calcium* **27**(2), 97-106 (2000).
2. Vines, A., McBean, G.J., and Blanco-Fernández, A. A flow-cytometric method for continuous measurement of intracellular Ca²⁺ concentration. *Cytometry A*. **77**(11), 1091-1097 (2010).

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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