

PRODUCT INFORMATION



Fluo-3 AM

Item No. 14960

CAS Registry No.: 121714-22-5
Formal Name: N-[4-[6-[(acetyloxy)methoxy]-2,7-dichloro-3-oxo-3H-xanthen-9-yl]-2-[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-3 Acetoxymethyl ester

MF: C₅₁H₅₀Cl₂N₂O₂₃

FW: 1,129.9

Purity: ≥90%

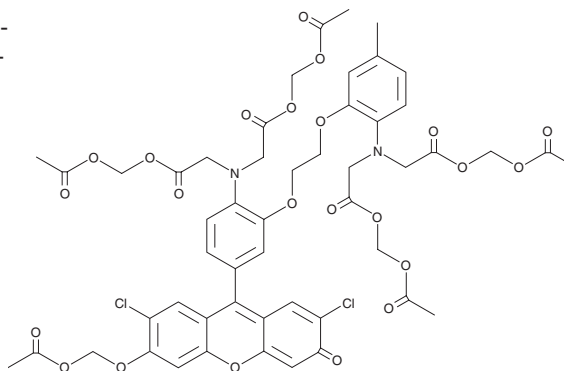
UV/Vis.: λ_{max}: 214, 369, 465 nm

Ex./Em. Max: 488/526 nm

Supplied as: A solution in acetonitrile

Storage: -20°C

Stability: ≥1 year



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

Description

Fluo-3 is a fluorescent calcium indicator commonly used in flow cytometry (FC) and cell-based experiments to detect changes in intracellular calcium levels.¹ Its absorption maximum at 506 nm makes it compatible with excitation at 488 nm by argon-ion laser sources. Fluo-3 provides intense fluorescence upon binding calcium, detected at a maximum emission at 526 nm which can be monitored by FL1 (green, 525 nm band pass) sensors in FC. Fluo-3AM is an acetoxymethyl (AM) ester of Fluo 3. This form, unlike fluo-3, is cell permeable and readily taken up by living cells, whereupon the AM moiety is enzymatically removed to produce fluo-3.²

References

1. Minta, A., Kao, J.P., and Tsien, R.Y. Fluorescent indicators for cytosolic calcium based on rhodamine and fluorescein chromophores. *J. Biol. Chem.* **264**(14), 8171-8178 (1989).
2. Sabnis, R.W. Handbook of biological dyes and stains: Synthesis and industrial applications. John Wiley & Sons, Inc., Hoboken, NJ, USA (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.

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