

PRODUCT INFORMATION



Quin-2 AM

Item No. 20422

CAS Registry No.: 83104-85-2

Formal Name: N-[2-[(acetyloxy)methoxy]-2-oxoethyl]-N-[2-[[8-[bis[2-[(acetyloxy)methoxy]-2-oxoethyl]amino]-6-methoxy-2-quinolinyl]methoxy]-4-methylphenyl]-glycine(acetyloxy)methyl ester

Synonym: Quin-2 Acetoxymethyl ester

MF: C₃₈H₄₃N₃O₁₈

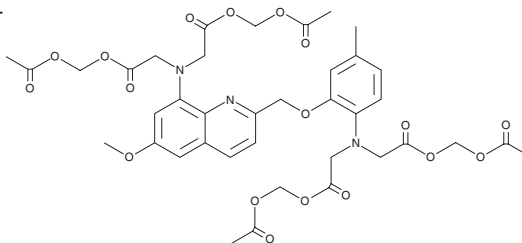
FW: 829.8

Purity: ≥90%

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

Quin-2 AM is supplied as a solid. A stock solution may be made by dissolving the quin-2 AM in the solvent of choice. Quin-2 AM is soluble in DMSO, which should be purged with an inert gas. We do not recommend storing the aqueous solution for more than one day.

Description

Quin-2 AM is a cell-permeant acetoxymethyl ester of the high affinity fluorescent calcium indicator quin-2 (Item No. 20421). As quin-2 AM enters cells, it is hydrolyzed by intracellular esterases to produce quin-2. Quin-2 binds calcium with a K_d value of 115 nM.¹ It displays high selectivity for calcium, as it is not affected by sodium gradients, membrane potential, or intracellular pH.¹ High affinity probes like quin-2 are ideal for monitoring low levels of calcium, as are found in resting cells.^{1,2} Loadings of up to 2 mM quin-2 are without serious toxic effects, so quin-2 may be used to buffer intracellular calcium transients. Excitation and emission maxima for quin-2 are 339 and 492 nm, respectively.

References

1. Tsien, R. Y., Pozzan, T., and Rink, T. J. Calcium homeostasis in intact lymphocytes: Cytoplasmic free calcium monitored with a new, intracellularly trapped fluorescent indicator *J. Cell. Biol.* **947(2)**, 325-334, (1982).
2. Minta, A., Kao, J. P., and Tsien, R. Y. Fluorescent indicators for cytosolic calcium based on rhodamine and fluorescein chromophores. *J. Bio. Chem.* **264(14)**, 8171-8178 (1989).

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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