BAPTA, AM Ester

BAPTA and its derivatives are calcium chelators that are commonly used to form calcium buffers with well-defined calcium concentrations. By injecting the chelators into cells or by incubating cells with the AM ester form of the chelators, one can control the cytosolic calcium concentration, an important means to study the roles of calcium.



Product attributes

CAS number	126150-97-8
Cell permeability	Membrane permeant
Storage Conditions	Store at -10 to -35 °C, Desiccate

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Product Description

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Key advantages of these calcium chelators include relative insensitivity toward intracellular pH change and fast release of calcium. Biotium offers several BAPTA chelators with calcium dissociation constants covering the biologically significant range from 10^{-7} to 10^{-2} M.

BAPTA AM ester is a membrane permeable form of BAPTA that can be loaded into cells by incubation. Because of the relatively low water solubility of the AM ester, the mild detergent Pluronic F-127 (catalog no. 59004) is often used as a dispersing agent to facilitate loading. BAPTA AM ester itself does not bind calcium, but once inside the cell is converted into BAPTA by cytoplasmic esterases. See catalog no. 50001 for information on BAPTA.

- Colorless solid soluble in DMSO
- Store desiccated at -20°C
- C₃₄H₄₀N₂O₁₈
- MW: 765

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