

Product Specification Sheet

Product Name: BAPTA-AM

Catalog Number: C2278

Technical information:

Chemical Formula: $C_{34}H_{40}N_2O_{18}$

CAS #: 126150-97-8

Molecular Weight: 764.68

Purity: > 98%

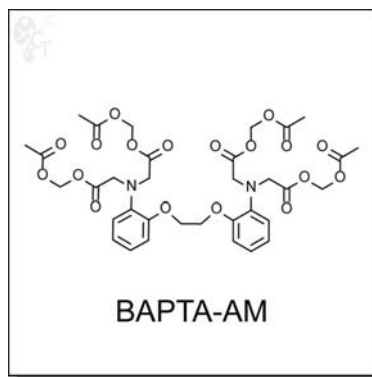
Appearance: White solid

Solubility: Soluble in DMSO up to 22 mM

Chemical Name: 1,2-Bis(2-aminophenoxy)ethane-N,N',N',N'-tetraacetic acid tetrakis(acetoxymethyl ester)

Storage: Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.



- Handling:**
- To make 10 mM stock solution, add 0.131mL of DMSO for each mg of BAPTA-AM
 - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

Biological Activity: BAPTA-AM is a rationally-designed relative of the well-known chelator EGTA. BAPTA-AM and its analogs have a 100-fold greater affinity for Ca^{2+} over Mg^{2+} , are resistant to pH changes, and are faster in uptake and release of Ca^{2+} . [1] BAPTA-AM, the acetic acid methyl ester analog of the original BAPTA, offers greater cell permeability and is known to inactivate protein kinase C.

Reference: 1. Tsien, R., New calcium indicators and buffers with high selectivity against magnesium and protons: design, synthesis, and properties of prototype structures. *Biochemistry*, 1980, 19, 2396-2404. Pubmed ID: 6770893

To reorder: <http://www.cellagentech.com/BAPTA-AM/>

For Technical Support: technical@cellagentech.com

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