

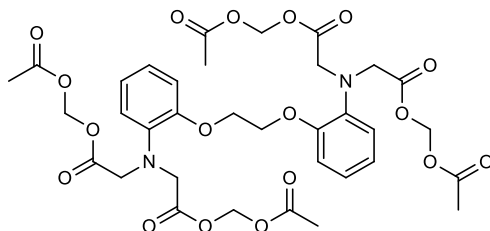
Catalog # 10-1203

BAPTA-AM

CAS# 126150-97-8

1,2-bis-(2-Aminophenoxy)ethane-N,N,N',N'-tetraacetic acid, tetraacetoxymethyl ester

Lot # X101473



BAPTA-AM is a selective cell permeable Ca^{2+} chelator. It is a widely used intracellular calcium sponge.^{1,2} Rapidly taken up by cells where it is irreversibly hydrolyzed to BAPTA by intracellular esterases. Pretreatment of cells with BAPTA-AM inhibits thapsigargin-induced responses.³ BAPTA-AM also blocks ether a-go-go-related gene potassium channels (K_i's: K_v1.5 = 1.23 μM , K_v11.1 = 1.30 μM , K_v1.3 = 1.45 μM).⁴

- 1) Smith *et al.* (1992), *Cytosolic calcium as a second messenger for collagen-induced platelet responses*; *Biochem. J.*, **288** 925
- 2) Yoshida *et al.* (1993), *Role of calcium ion in induction of apoptosis by etoposide in human leukemia HL-60 cells*; *Biochem. Biophys. Res. Commun.*, **196** 927
- 3) Jiang *et al.* (1994), *Intracellular Ca^{2+} signals activate apoptosis in thymocytes: studies using the Ca^{2+} -ATPase inhibitor thapsigargin*; *Exp. Cell Res.*, **212** 84
- 4) Tang *et al.* (2007), *The membrane permeable calcium chelator BAPTA-AM directly blocks human ether a-go-go-related gene potassium channels stably expressed in HEK 293 cells*; *Biochem. Pharmacol.* **74** 1596

PHYSICAL DATA

Molecular Weight:	764.70
Molecular Formula:	$\text{C}_{34}\text{H}_{40}\text{N}_2\text{O}_{18}$
Purity:	95% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 15 mg/ml), DMF (up to 25 mg/ml) or Ethanol (up to 5 mg/ml with warming)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO, DMF, or Ethanol may be stored at -20°C for up to 1 week.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.