

FT-46778A

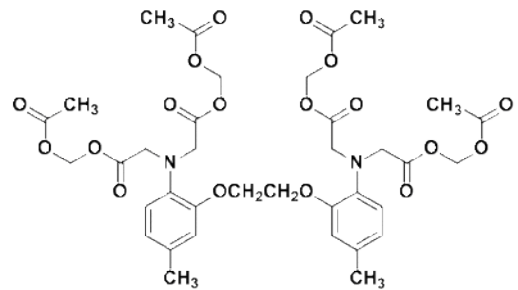


5,5'-Dimethyl-BAPTA, AM

A cell membrane permeant form of BAPTA that is highly selective for Ca^{2+} over Mg^{2+} and It can be used to control the level of intracellular Ca^{2+}

Product Description

Name :	5,5'-Dimethyl-BAPTA, AM 1,2-Bis(2-amino-5-methylphenoxy)ethane-N,N,N',N'-tetraacetic acid tetrakis(acetoxymethyl) ester (MAPTA)
Catalog Number :	FP-46778A , 25 mg
Structure & Properties:	CAS: [147504-94-7] $C_{36}H_{44}N_2O_{18}$ MW= 792.74 g/mol
physical	Soluble: DMSO, DMF, Acetonitrile, Ethyl Acetate and Chloroform
optical	Absorption : $\lambda_{exc (MeOH)} = 287 \pm 3 \text{ nm}$ EC= 5 900 ± 500 M⁻¹ cm⁻¹
other	K_a of Ca²⁺-Binding : Kd (no Mg ²⁺): 0.16 uM, Kd (1 mM Mg ²⁺): 0.44 uM
Storage:	-20°C .Protect from light and moisture



Introduction

Dimethyl BAPTA AM ester is a membrane permeable form of Dimethyl BAPTA that can be loaded into cells by incubation. Dimethyl BAPTA AM ester itself does not bind calcium, but once inside the cell is converted into Dimethyl BAPTA by cytoplasmic esterases.

Technical and scientific information

1. References

- Furuta A. *et al.*, Microtubule Disruption with BAPTA and Dimethyl BAPTA by a Calcium Chelation-Independent Mechanism in 3T3-L1 Adipocytes, *Endocrine Journal*, Vol. 56 No. 2:235-243 (2009)
- González-Flores D. *et al.*, Nanoceria protects from alterations in oxidative metabolism and calcium overloads induced by TNF α and cycloheximide in U937 cells: pharmacological potential of nanoparticles, *Molecular and Cellular Biochemistry* Volume 397, Issue 1:245–253 (2014)

FT-46778A

2. Related products

- BAPTA AM ester, FP-486103
- Bapta-FF AM , FP-48338A

Ordering information

Catalog size quantities and prices may be found at <http://www.interchim.com>.

Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask : FluoProbes® / Interchim; Hotline : +33(0)4 70 03 73 06

Disclaimer : Materials from FluoProbes® are sold **for research use only**, and are not intended for food, drug, household, or cosmetic use. FluoProbes® is not liable for any damage resulting from handling or contact with this product.

