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DATASHEET

BAPTA-AM

Product overview

Name	BAPTA-AM
Cat No	HB0981
Biological action	Chelator
Purity	>95%
Description	Cell permeable Ca^{2+} chelator

Images

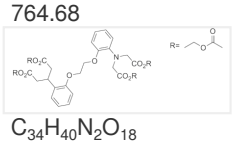
Biological Data

Biological description	Cell permeable Ca^{2+} chelator. Hydrolysed by cytosolic esterases. Useful for manipulation of cellular Ca^{2+} levels. Open channel blocker of K_v channels (IC_{50} values are 1.3, 1.45 and 1.23 µM for K_v 11.1, hK_v 1.3 and hK_v 1.5 channels respectively). BAPTA analog.

Solubility & Handling

Storage instructions	-20°C
Solubility overview	Soluble in DMSO (30mM)
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

Chemical name	1,2-*Bis*(2-aminophenoxy)ethane-*N*,*N*,*N*',*N*'-tetraacetic acid tetrakis(acetoxymethyl ester)
Molecular Weight	764.68
Chemical structure	
Molecular Formula	$C_{34}H_{40}N_2O_{18}$
CAS Number	126150-97-8
PubChem identifier	2293
SMILES	O=C(OCOC(C)=O)CN(CC(OCOC(C)=O)=O)C1=CC=CC=C1OCCOC2=CC=CC=C2N(CC(OCOC(C)=O)=O)CC(OCOC(C)=O)=O

InChiKey	YJIYWYAMZFVECX-UHFFFAOYSA-N

References

The membrane permeable calcium chelator BAPTA-AM directly blocks human ether a-go-go-related gene potassium channels stably expressed in HEK 293 cells.

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PubMedID 17826747

Nonsteroidal anti-inflammatory drug flufenamic acid is a potent activator of AMP-activated protein kinase.

Chi Y *et al* (2011) J Pharmacol Exp Ther 339(1)
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BAPTA/AM, an intracellular calcium chelator, induces delayed necrosis by lipoxygenase-mediated free radicals in mouse cortical cultures.

Wie MB *et al* (2001) Prog Neuropsychopharmacol Biol Psychiatry 25(8)
PubMedID 11642660