BAPTA-AM, Ca\textsuperscript{2+} chelator ab120503

Overview

Product name: BAPTA-AM, Ca\textsuperscript{2+} chelator

Description: Selective Ca\textsuperscript{2+} chelator. Analog of BAPTA.

Biological description: Selective Ca\textsuperscript{2+} chelator. Cell-permeable analog of BAPTA (ab120449). Useful for manipulation of intracellular free Ca\textsuperscript{2+} levels. Shows varied biological activity. Blocks hK\textsubscript{v}1.5, K\textsubscript{v}11.1 (hERG) and hK\textsubscript{v}1.3 channels (K\textsubscript{i} values are 1.23, 1.30 and 1.45 μM, respectively).

Purity: > 97%

CAS Number: 126150-97-8

Chemical structure:

![Chemical structure of BAPTA-AM](image)

Properties

Chemical name: 1,2-Bis(2-aminophenoxy)ethane-\textit{N,N,N',N'}-tetraacetic acid tetrakis(acetoxymethyl ester)

Molecular weight: 764.68

Molecular formula: C\textsubscript{34}H\textsubscript{40}N\textsubscript{2}O\textsubscript{18}

Storage instructions: Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12 months.

Solubility overview: Soluble in DMSO to 100 mM

Handling:

Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.

Refer to SDS for further information.

For more information on AM esters please visit our AM esters FAQ page.

Need more advice on solubility, usage and handling? Please visit our frequently asked questions (FAQ) page for more details.
ab66705 staining PAI1 in HepG2 cells treated with BAPTA-AM (ab120503), by ICC/IF. Increase in PAI1 expression correlates with increased concentration of BAPTA-AM, as described in literature. The cells were incubated at 37°C for 4 hours in media containing different concentrations of ab120503 (BAPTA-AM) in DMSO, fixed with 100% methanol for 5 minutes at -20°C and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with ab66705 (5 µg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat anti-rabbit polyclonal antibody (ab96899) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"