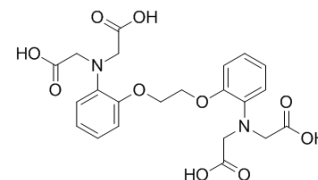


BAPTA

Cat. No.:	HY-100168		
CAS No.:	85233-19-8		
Molecular Formula:	C ₂₂ H ₂₄ N ₂ O ₁₀		
Molecular Weight:	476.43		
Target:	Others		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 25 mg/mL (52.47 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.0989 mL	10.4947 mL	20.9894 mL
		5 mM	0.4198 mL	2.0989 mL	4.1979 mL
10 mM		0.2099 mL	1.0495 mL	2.0989 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.58 mg/mL (5.42 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.58 mg/mL (5.42 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.58 mg/mL (5.42 mM); Clear solution 				

BIOLOGICAL ACTIVITY

Description	BAPTA is a non-permeable, selective extracellular calcium chelator, with 105-fold greater affinity for Ca ²⁺ than Mg ²⁺ . BAPTA is a valuable tool to study the role of calcium in cell signaling ^{[1][2]} .
IC ₅₀ & Target	Ca ²⁺ chelator ^[1]

CUSTOMER VALIDATION

-
- Sci Immunol. 2019 Jun 28;4(36):eaau6426.
 - Sci Total Environ. 2019 Oct.
 - Aging (Albany NY). 2019 Nov 22;11.
 - J Cell Mol Med. 2020 Jul 6.
 - Vet Microbiol. 2019 Nov.

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- [1]. Mizutani T, et al. Sodium Lauryl Sulfate Stimulates the Generation of Reactive Oxygen Species through Interactions with Cell Membranes. J Oleo Sci. 2016 Dec 1;65(12):993-1001.
- [2]. Corns LF, et al. Tmc1 Point Mutation Affects Ca²⁺ Sensitivity and Block by Dihydrostreptomycin of the Mechanoelectrical Transducer Current of Mouse Outer Hair Cells. J Neurosci. 2016 Jan 13;36(2):336-49.
- [3]. Fredholm BB, et al. Effect of an intracellular calcium chelator on the regulation of electrically evoked [3H]-noradrenaline release from rat hippocampal slices. Br J Pharmacol. 1993;108(1):126-131.
- [4]. Salinthon S, et al. Lipoic acid stimulates cAMP production via G protein-coupled receptor-dependent and -independent mechanisms. J Nutr Biochem. 2011;22(7):681-690.
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Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA