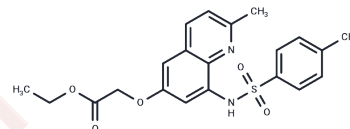


Zinquin ethyl ester

Chemical Properties

CAS No. :	181530-09-6
Formula:	C ₂₁ H ₂₂ N ₂ O ₅ S
Molecular Weight:	414.48
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Zinquin ethyl ester is a cell membrane-penetrating and selective fluorescent probe for zinc ions that measures intracellular levels of Zn(2+) and Ca(2+) ions and can be used to stain early embryos.
Targets(IC50)	Others
Cell Research	<p>RPE cell uptake of Zn²⁺ experiment</p> <p>a. Solution preparation: Use DMSO to prepare a 10 mM Zinquin ethyl ester stock solution. For example, weigh 1 mg of Zinquin ethyl ester and add 0.4825 mL of DMSO. Note: The prepared stock solution should be stored in aliquots to avoid repeated freezing and thawing. Unused stock solution should be divided into aliquots of single-use volume and stored at -20°C in the dark.</p> <p>b. Operation steps:</p> <ol style="list-style-type: none"> 1. RPE cells were incubated with 0 ~ 18 nM Zn²⁺ in serum-free MEM without Zn²⁺ detection level for 60 minutes. 2. After removing extracellular Zn²⁺ from the culture, the cells were loaded with 2.5 mM zinc fluorescent sensor Zinquin ethyl ester for 30 minutes. 3. Observe the fluorescent Zinquin-Zn²⁺ complex under a fluorescence microscope with excitation at 364 nm and emission at 385 nm. <p>The above information is based on published literature. Experimental procedures should be appropriately modified to meet specific research demands.</p>

Solubility Information

Solubility	<p>H₂O: < 0.1 mg/mL (insoluble)</p> <p>DMSO: 67.5 mg/mL (162.85 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)</p>
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4127 mL	12.0633 mL	24.1266 mL
5 mM	0.4825 mL	2.4127 mL	4.8253 mL
10 mM	0.2413 mL	1.2063 mL	2.4127 mL
50 mM	0.0483 mL	0.2413 mL	0.4825 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Leung KW, et al. Expression of ZnT and ZIP zinc transporters in the human RPE and their regulation by neurotrophic factors. Invest Ophthalmol Vis Sci. 2008 Mar;49(3):1221-31.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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