

Product Data Sheet

Zinquin ethyl ester

Cat. No.: HY-124171

CAS No.: 181530-09-6

Molecular Formula: $C_{21}H_{22}N_2O_5S$ Molecular Weight: 414.47

Target: Fluorescent Dye

Pathway: Others

Storage: -20°C, protect from light

* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light)

SOLVENT & SOLUBILITY

In Vitro DMSO: $\geq 50 \text{ mg/mL} (120.64 \text{ mM})$

H₂O: < 0.1 mg/mL (ultrasonic) (insoluble)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.4127 mL	12.0636 mL	24.1272 mL
	5 mM	0.4825 mL	2.4127 mL	4.8254 mL
	10 mM	0.2413 mL	1.2064 mL	2.4127 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: 5 mg/mL (12.06 mM); Suspended solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

Zinquin ethyl ester is a fluorescent derivative of Zinquin and is a fluorescent probe of cytosolic zinc. Zinquin ethyl ester is able to penetrate cell membranes and is lipophilic and zinc-sensitive. Zinquin ethyl ester can combine with Zn^{2+} in the presence of Ca^{2+} and Mg^{2+} to produce blue fluorescence^[1].

REFERENCES

[1]. Kevyn E Merten, et al. Zinc inhibits doxorubicin-activated calcineurin signal transduction pathway in H9c2 embryonic rat cardiac cells. Exp Biol Med (Maywood). 2007 May;232(5):682-9.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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