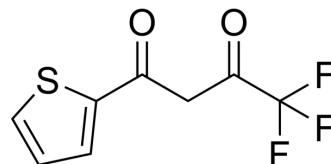


2-Thenoyltrifluoroacetone

Cat. No.:	HY-D0190
CAS No.:	326-91-0
Molecular Formula:	C ₈ H ₅ F ₃ O ₂ S
Molecular Weight:	222.18
Target:	Biochemical Assay Reagents
Pathway:	Others
Storage:	4°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (450.09 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		1 mM		4.5009 mL	22.5043 mL	45.0086 mL
		5 mM		0.9002 mL	4.5009 mL	9.0017 mL
	10 mM		0.4501 mL	2.2504 mL	4.5009 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (11.25 mM); Clear solution					
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (11.25 mM); Clear solution					
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (11.25 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	2-Thenoyltrifluoroacetone is a chelating agent. 2-Thenoyltrifluoroacetone can be used for the complexation of various metal ions including Mn(II), Co(III), Ni(II), et al.. 2-Thenoyltrifluoroacetone possesses antitubercular and cytotoxic activities. 2-Thenoyltrifluoroacetone is also used as common inhibitor of mitochondrial electron flux and to analyze the endothelial cell dysfunction. Besides, copper (II) complex of 2-Thenoyltrifluoroacetone has anticancer activity against K562 ^[1] .
IC₅₀ & Target	Metal ions ^[1]

CUSTOMER VALIDATION

- Immunity. 2023 Nov 14;56(11):2523-2541.e8.

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REFERENCES

[1]. Masoudi Khoram, et al. Comparative evaluation of the efficiency of batch and flow electrochemical cells in the synthesis of a new derivative of 2-thenoyltrifluoroacetone. Journal of Electroanalytical Chemistry. 2020;879.

Caution: Product has not been fully validated for medical applications. For research use only.

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