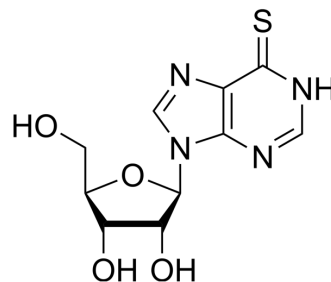


6-Thioinosine

Cat. No.:	HY-128671
CAS No.:	574-25-4
Molecular Formula:	C ₁₀ H ₁₂ N ₄ O ₄ S
Molecular Weight:	284.29
Target:	Nucleoside Antimetabolite/Analog
Pathway:	Cell Cycle/DNA Damage
Storage:	-20°C, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 83.33 mg/mL (293.12 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	3.5175 mL	17.5877 mL	35.1753 mL
		5 mM	0.7035 mL	3.5175 mL	7.0351 mL
		10 mM	0.3518 mL	1.7588 mL	3.5175 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: ≥ 2.08 mg/mL (7.32 mM); Clear solution				
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (7.32 mM); Clear solution				
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (7.32 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	6-Thioinosine (6TI) is a purine antimetabolite, acts as an anti-adipogenesis agent, downregulates mRNA levels of PPAR γ and C/EBP α , as well as PPAR γ target protein such as LPL, CD36, aP2, and LXRA ^{[1][2]} .
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REFERENCES

[1]. Lee J, et al. Anti-adipogenesis by 6-thioinosine is mediated by downregulation of PPAR gamma through JNK-dependent upregulation of iNOS. Cell Mol Life Sci. 2010 Feb;67(3):467-81.

[2]. Neubert D, et al. Interference of 6-mercaptopurine riboside, 6-methylmercaptopurine riboside and azathioprine with the morphogenetic differentiation of mouse extremities in vivo and in organ culture. Naunyn Schmiedebergs Arch Pharmacol. 1977 Jun;298(2):93-105.

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