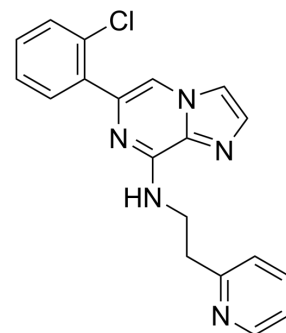


## TH6342

Cat. No.:	HY-161296
Molecular Formula:	C <sub>19</sub> H <sub>16</sub> ClN <sub>5</sub>
Molecular Weight:	349.82
Target:	Bacterial; HIV
Pathway:	Anti-infection
Storage:	<div> <div>Powder</div> <div>-20°C</div> <div>3 years</div> </div> <div> <div>In solvent</div> <div>-80°C</div> <div>6 months</div> </div> <div> <div></div> <div>-20°C</div> <div>1 month</div> </div>



### SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (285.86 mM; Need ultrasonic)					
	Preparing Stock Solutions	<div><div>Solvent</div><div>Concentration</div></div>	Mass	1 mg	5 mg	10 mg
		1 mM		2.8586 mL	14.2931 mL	28.5861 mL
		5 mM		0.5717 mL	2.8586 mL	5.7172 mL
		10 mM		0.2859 mL	1.4293 mL	2.8586 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 (7.15 mM); Clear solution					

### BIOLOGICAL ACTIVITY

Description	TH6342 is a SAMHD1 modulator that binds to pretetrameric SAMHD1 and prevents its oligomerization and allosteric activation. SAMHD1 is a dNTP triphosphohydrolase and an HIV-1 restriction factor. SAMHD1 can limit the replication of retroviruses and DNA viruses and has antiviral effects. The inhibitory mechanism of TH6342 does not occupy the SAMHD1 nucleotide-binding pocket, gently binds the target, and functions as a chemical probe <sup>[1]</sup> .
In Vitro	TH6342 (2.5, 10, 40 μM) blocks dGTP-induced SAMHD1 activation in a dose-dependent manne, without altering the stability of SAMHD1 to pronase treatment under 0.05-0.5 mM concentrartion <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

[1]. Zhang SM, et al. Identification and evaluation of small-molecule inhibitors against the dNTPase SAMHD1 via a comprehensive screening funnel. iScience. 2024 Jan

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

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