

# 5-Iodotubercidin

Catalog No: tcsc0897



## Available Sizes

**Size:** 2mg

**Size:** 5mg

**Size:** 25mg

**Size:** 50mg



## Specifications

**CAS No:**

24386-93-4

**Formula:**

$C_{11}H_{13}IN_4O_4$

**Pathway:**

Metabolic Enzyme/Protease;Neuronal Signaling

**Target:**

Adenosine Kinase;Adenosine Kinase

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 49$  mg/mL (124.95 mM)

**Alternative Names:**

NSC 113939; 5-ITu

**Observed Molecular Weight:**

392.15

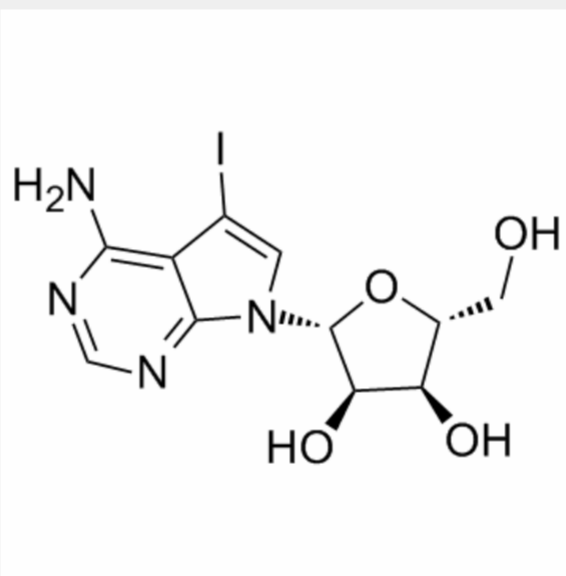
## Product Description

5-Iodotubercidin is a potent **adenosine kinase** inhibitor with **IC<sub>50</sub>** of 26 nM.

IC50 & Target: IC50: 26 nM (adenosine kinase)

***In Vitro:*** 5-Iodotubercidin (40 μM) enhances the rate of phosphorylase inactivation and shortens the lag before the activation of glycogen synthase. 5-Iodotubercidin (50 μM) antagonizes the effects of glucagon and vasopressin, but does not affect the basal concentration of free calcium in single hepatocytes<sup>[1]</sup>. 5-Iodotubercidin (20 μM) causes an important decrease in ATP concentration, and a concomitant smaller increase in AMP concentration. 5-Iodotubercidin decreases the activity of ACC and the rates of synthesis of fatty acids and cholesterol. In line with the iodotubercidin-mediated inhibition of ACC, 5-iodotubercidin induces a marked decrease in the intracellular concentration of malonyl-CoA<sup>[3]</sup>. 5-Iodotubercidin causes a strong decrease in the immunofluorescence levels of P-T3-H3, and depletion of P-T3-H3 is complete at 10 μM 5-5-iodotubercidin<sup>[4]</sup>.

***In Vivo:*** 5-Iodotubercidin (1 mL/kg, i.p.) is in agreement with activity observed against bicuculline-induced seizures following local administration of the AKI into the prepiriform cortex<sup>[2]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!