Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

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 : ≥ 49 mg/mL (124.95 mM)

Alternative Names:
NSC 113939; 5-ITu

Observed Molecular Weight:
392.15

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Product Description

5-Iodotubercidin is a potent **adenosine kinase** inhibitor with **IC_{50}** 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[1]. 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[3]. 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[4].

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[2].