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

Inauhzin

Catalog No: tcsc2404

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
309271-94-1

Formula:
$C_{25}H_{19}N_5OS_2$

Pathway:
Epigenetics;Cell Cycle/DNA Damage;Apoptosis

Target:
Sirtuin;Sirtuin;MDM-2/p53

Purity / Grade:
>98%

Solubility:
DMSO : 21 mg/mL (44.72 mM; Need ultrasonic and warming)

Alternative Names:
INZ

Observed Molecular Weight:
469.58

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Product Description

Inauhzin is a dual **SirT1/IMPDH2** inhibitor, and acts as an activator **p53**, used in the research of cancer.

IC50 & Target: SirT1, IMPDH2, MDM-2/p53[3]

In Vitro: Inauhzin (10 μM) induces p53 levels as effectively as actinomycin D (10 nM), and mediates p53-dependent cytotoxicity through its specific functional groups in human lung carcinoma H460 cells. Inauhzin (2 μM) induces p53 level and activity as well as p53-dependent apoptosis. Inauhzin also stabilizes p53 and inhibits its ubiquitylation. Inauhzin induces acetylation of p53 in H460 cells, but not tubulin, which is affected by knockdown of SIRT1[1]. Inauhzin (0-2 μM) significantly enhances the expression level and activity of p53 in HCT116$^{p53+/+}$ cells and enhances the expression level and activity of p53 in H460 cells in a dose-dependent manner. Inauhzin and Nutlin-3 demonstrate synergistic cytotoxicity in the Nutlin-3 low-sensitive cells. Inauhzin and Nutlin-3 synergistically induce p53-dependent apoptosis[2]. Inauhzin targets both SirT1 and IMP dehydrogenase 2 (IMPDH2), and acts as a potent p53 activator[3].

In Vivo: Inauhzin (30 mg/kg, i.p.) effectively induces apoptosis and suppresses tumour growth of H460 xenograft harbouring p53[1]. Inauhzin (30 mg/kg, i.p.) reduces the HCT116 tumor volume by appr 70%. Inauhzin (15 mg/kg) in combination with 150 mg/kg of Nutlin-3 demonstrates a significant synergy on p53 induction, apoptosis and tumor suppression of HCT116$^{p53+/+}$ xenografts[2].