

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

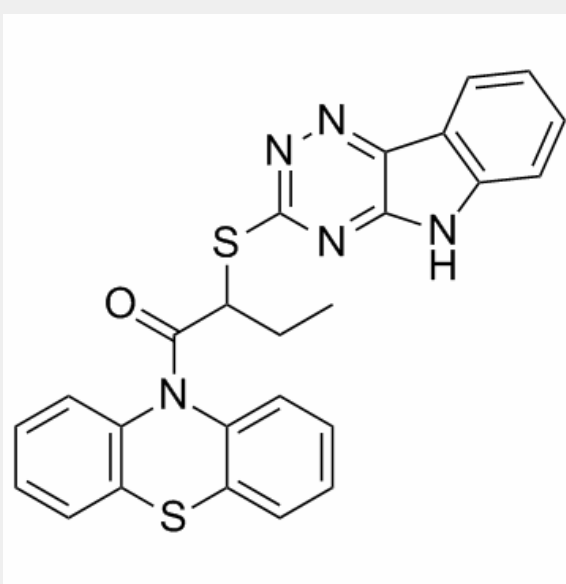
Product Description

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 μ M) 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 μ M) 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 μ M) 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].



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