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BVT948

Catalog No: tcsc0019823

Available Sizes

Size: 5mg

Specifications

CAS No:
39674-97-0

Formula:
$C_{14}H_{11}NO_3$

Pathway:
Epigenetics;Metabolic Enzyme/Protease;Metabolic Enzyme/Protease

Target:
Histone Methyltransferase;Cytochrome P450;Phosphatase

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Observed Molecular Weight:
241.24

Product Description

BVT948 is a **protein tyrosine phosphatase** (**PTP**) inhibitor which can also inhibit several **cytochrome P450** (**P450**) isoforms and lysine methyltransferase **SETD8**.

IC50 & Target: PTP[1], P450[1], SETD8[2]

In Vitro: Results show that the effect of BVT948 (BVT.948) is to strengthen the insulin signal and has no effects on the duration of the signal. BVT948 appears to be an effective inhibitor of both protein tyrosine phosphatases (PTP activity and P450 activity)[1]. BVT948 efficiently and selectively suppresses cellular H4 lysine 20 (H4K20me1) at doses lower than 5 μM within 24 h. The cells

treated with BVT948 recapitulate cell-cycle-arrest phenotypes similar to what are reported for knocking down SETD8 by RNAi[2]. Treatment of MCF-7 cells with 0.5, 1 or 5 μM of BVT948 for 24 h does not cause any significant changes in cell viability. BVT948 inhibits TPA-induced MMP-9 up-regulation in a dose-dependent manner. Treatment with BVT948 inhibits TPA-stimulated NF-κB binding activity, but not AP-1 binding activity. BVT948 does not affect the MAPK phosphorylation by TPA. Treatment with BVT948 diminishes the TPA-induced cell invasion by 50%[3].

In Vivo: Results show that 3 μmol/kg BVT948 (BVT.948) significantly enhances glucose clearance from the blood stream in response to insulin compare with vehicle-treated controls[1].