

GNE-617 (hydrochloride)

Catalog No: tcsc1939

Available Sizes
Size: 2mg
Size: 5mg
Size: 10mg
Size: 50mg
Size: 100mg
Specifications Specifications
Formula: C ₂₁ H ₁₆ CIF ₂ N ₃ O ₃ S
Pathway: Metabolic Enzyme/Protease
Target: Nampt
Purity / Grade: >98%
Observed Molecular Weight: 463.88

Product Description

GNE-617 hydrochloride is a specific **NAMPT** inhibitor that inhibits the biochemical activity of NAMPT with an IC_{50} of 5 nM and exhibits efficacy in xenograft models of cancer.

IC50 & Target: IC50: 5 nM (NAMPT)^[1]





In Vitro: The activity of GNE-617 hydrochloride is evaluated on a panel 53 non-small cell lung cancer (NSCLC) cell lines in the presence or absence of 10 μ M nicotinic acid. GNE-617 inhibits NAMPT IC50 of 18.9 nM in A549 cell. The majority of cell lines exhibit a steep dose response to GNE-617 when evaluated by decrease in ATP or total nucleic acid, and the cytotoxicity is completely rescued by simultaneous addition of nicotinic acid. The majority of the cell lines tested have IC₅₀ values below 100 nM, with approximately half with IC₅₀ values less than 10 nM. Eighteen cell lines are not rescued with nicotinic acid, and these non-rescuable cell lines tended to have lower IC₅₀ values (P=0.008, Fisher exact test, IC₅₀[1].

In Vivo: In rats, GNE-617 hydrochloride (administered QD) and GNE-875 (administered BID) are associated with more severe retinal toxicity at similar exposures and dosing duration compared with GMX-1778 (administered BID). The mouse efficacy studies using GNE-617, GNE-618, and GMX-1778 are designed to assess efficacy and opportunistically used to assess retinal toxicity in mice. NAMPTi retinal toxicity is observed with GNE-617 and GMX-1778; however, the different study durations between GNE-617 and GMX-1778 do not allow for direct comparison of retinal toxicity^[2].

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