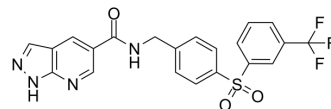


GNE-618

Cat. No.:	HY-12628		
CAS No.:	1362151-42-5		
Molecular Formula:	C ₂₁ H ₁₅ F ₃ N ₄ O ₃ S		
Molecular Weight:	460.43		
Target:	NAMPT		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 125 mg/mL (271.49 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
	Preparing Stock Solutions	1 mM	2.1719 mL	10.8594 mL
	5 mM	0.4344 mL	2.1719 mL	
	10 mM	0.2172 mL	1.0859 mL	2.1719 mL
Please refer to the solubility information to select the appropriate solvent.				
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (4.52 mM); Clear solution			
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (4.52 mM); Clear solution			
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (4.52 mM); Clear solution			

BIOLOGICAL ACTIVITY

Description	GNE-618 is a potent, orally active nicotinamide phosphoribosyl transferase (NAMPT) inhibitor with an IC ₅₀ of 6 nM. GNE-618 depletes NAD levels and induces tumor cell death. Anti-tumor activity ^[1] .
IC ₅₀ & Target	IC50: 6 nM (NAMPT) ^[1]
In Vitro	GNE-618 reduces levels of NAD with an EC ₅₀ of 2.6 nM in the NSCLC cell line Calu-6 ^[1] . GNE-618 (10-30 nM; 72 hours) reveals an increase in the sub-2N population and a decreases in the percentage of cells in the

	<p>G1 and M phases of the cell cycle in Calu-6 cells^[1]. GNE-618 also reduces cellular proliferation of Calu-6 cells as determined using two different assay formats, either measuring ATP (EC₅₀ of 13.6 ± 1.8 nM) or total protein content (SRB assay; EC₅₀ of 25.8 ± 4.2 nM)^[1] MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>
In Vivo	<p>GNE-618 (100 mg/kg; p.o.; twice daily for 5 days) significantly inhibits tumor growth by 88% and has minimal effects on body weight in STO#81 patient-derived gastric model^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

REFERENCES

[1]. Xiao Y, et al. Dependence of tumor cell lines and patient-derived tumors on the NAD salvage pathway renders them sensitive to NAMPT inhibition with GNE-618. *Neoplasia*. 2013 Oct;15(10):1151-60.

Caution: Product has not been fully validated for medical applications. For research use only.

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