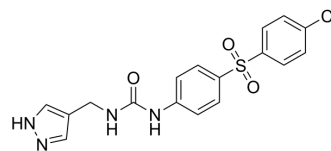


Nampt activator-2

Cat. No.:	HY-148822		
CAS No.:	2237268-90-3		
Molecular Formula:	C ₁₇ H ₁₅ ClN ₄ O ₃ S		
Molecular Weight:	390.84		
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 : 250 mg/mL (639.65 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.5586 mL	12.7930 mL	25.5859 mL
5 mM	0.5117 mL	2.5586 mL	5.1172 mL
10 mM	0.2559 mL	1.2793 mL	2.5586 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Nampt activator-2 (compound 34) is a potent NAMPT activator, with EC₅₀ of 0.023 μM. Nampt activator-2 shows moderate activity against CYP2C9 (0.060 μM), 2D6 (0.41 μM) and 2C19 (0.59 μM)^[1].

In Vitro

Nampt activator-2 (compound 34) (10 μM, 4 h) results in a marked increase of both NMN and NAD in A549 lung epithelial cells ^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Nampt activator-2 (compound 34) (1 mg/kg iv and 10 mg/kg po, once) shows low plasma clearance, good exposure and excellent oral bioavailability (%F = 80)^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Mouse ^[1]
Dosage:	1 mg/kg iv and 10 mg/kg po

Administration:	IV, PO; once (Pharmacokinetic Analysis)	
Result:	Pharmacokinetic Parameters of Nampt activator-2 in mouse ^[1] .	
	IV (1 mg/kg)	PO (10 mg/kg)
C _{max} (ng/mL)		9550
AUC ₀₋₂₄ (ng/mL×h)		54463
t _{1/2} (h)		3.2
CL (mL/min/kg)	3	
Vd (L/kg)	0.61	
F (%)		80

REFERENCES

[1]. Pinkerton AB, et al. Optimization of a urea-containing series of nicotinamide phosphoribosyltransferase (NAMPT) activators. *Bioorg Med Chem Lett.* 2021 Jun 1;41:128007.

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

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