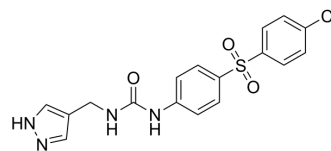


## Nampt activator-2

Cat. No.:	HY-148822		
CAS No.:	2237268-90-3		
Molecular Formula:	C <sub>17</sub> H <sub>15</sub> ClN <sub>4</sub> O <sub>3</sub> 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 EC<sub>50</sub> of 0.023 μM. Nampt activator-2 shows moderate activity against CYP2C9 (0.060 μM), 2D6 (0.41 μM) and 2C19 (0.59 μM)<sup>[1]</sup>.

#### 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 <sup>[1]</sup>.

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)<sup>[1]</sup>.

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

Animal Model:	Mouse <sup>[1]</sup>
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 <sup>[1]</sup> .	
	IV (1 mg/kg)	PO (10 mg/kg)
C <sub>max</sub> (ng/mL)		9550
AUC <sub>0-24</sub> (ng/mL×h)		54463
t <sub>1/2</sub> (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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