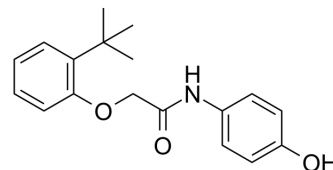


## NAT

<b>Cat. No.:</b>	HY-144776		
<b>CAS No.:</b>	831243-31-3		
<b>Molecular Formula:</b>	C <sub>18</sub> H <sub>21</sub> NO <sub>3</sub>		
<b>Molecular Weight:</b>	299.36		
<b>Target:</b>	NAMPT		
<b>Pathway:</b>	Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



## SOLVENT & SOLUBILITY

### In Vitro

DMSO : ≥ 100 mg/mL (334.05 mM)  
 \* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	3.3405 mL	16.7023 mL	33.4046 mL
	5 mM	0.6681 mL	3.3405 mL	6.6809 mL
	10 mM	0.3340 mL	1.6702 mL	3.3405 mL

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

### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
 Solubility: ≥ 2.5 mg/mL (8.35 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
 Solubility: ≥ 2.5 mg/mL (8.35 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
 Solubility: ≥ 2.5 mg/mL (8.35 mM); Clear solution

## BIOLOGICAL ACTIVITY

### Description

NAT is an initial hit of NAMPT activator. NAMPT is the rate-limiting enzyme in the NAD salvage pathway, which makes it an attractive target for the research of many diseases associated with NAD exhaustion such as neurodegenerative diseases<sup>[1]</sup>.

## REFERENCES

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[1]. Wang L, et al. Optimization of NAMPT activators to achieve in vivo neuroprotective efficacy [published online ahead of print, 2022 Mar 16]. Eur J Med Chem. 2022;236:114260.

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

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