

C004019

## Chemical Properties

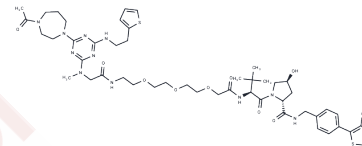
CAS No. : 2417159-57-8

Formula: C49H70N12O9S2

Molecular Weight: 1035.29

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	C004019 is a small molecule PROTAC capable of targeting tau for selective protein degradation from the cell, while recruiting tau and E3 ligase (Vhl) for selective enhancement of tau ubiquitination and proteolysis. C004019 is a candidate for AD and related tau protein diseases.
Targets(IC50)	Microtubule Associated,PROTACs
In vitro	C004019 induced a robust tau clearance via promoting its ubiquitination-proteasome-dependent proteolysis in HEK293 cells with stable or transient overexpression of human tau (hTau), and in SH-SY5Y that constitutively overexpress hTau.[1]
In vivo	C004019 induced a robust tau clearance in vivo by intracerebral ventricular infusion. Most importantly, both single-dose and multiple-doses (once per 6 days for a total of 5 times) subcutaneous administration of C004019 remarkably decreased tau levels in the brains of wild-type, hTau-transgenic and 3xTg-AD mice with the improvement of synaptic and cognitive functions.[1]

## Solubility Information

Solubility	DMSO: 255 mg/mL (246.31 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

### Preparing Stock Solutions

---

	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	0.9659 mL	4.8296 mL	9.6591 mL
5 mM	0.1932 mL	0.9659 mL	1.9318 mL
10 mM	0.0966 mL	0.483 mL	0.9659 mL
50 mM	0.0193 mL	0.0966 mL	0.1932 mL

---

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Wang W, et al. A novel small-molecule PROTAC selectively promotes tau clearance to improve cognitive functions in Alzheimer-like models. *Theranostics*. 2021;11(11):5279-5295.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481