

MF-094

## Chemical Properties

CAS No. : 2241025-68-1

Formula: C<sub>30</sub>H<sub>37</sub>N<sub>3</sub>O<sub>4</sub>S

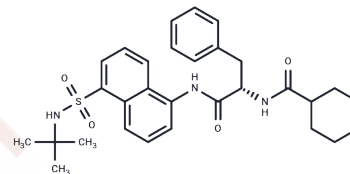
Molecular Weight: 535.7

Store at low temperature, Keep away from direct sunlight

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	MF-094 is a selective USP30 inhibitor with IC <sub>50</sub> of 0.12 μM. MF-094 can increase protein ubiquitination and accelerate mitophagy.
Targets(IC <sub>50</sub> )	DUB
In vitro	In hypoxic trophoblast cells supplemented with MF-094, GSH and SOD levels increased, while MDA levels decreased. [2]
In vivo	Subcutaneous injection of MF-094 can promote the ubiquitination level of FUNDC1. MF-094 can significantly reduce the increase in systolic blood pressure and urine protein in PE mice. [2]

## Solubility Information

Solubility	DMSO: 150 mg/mL (280.01 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	1.8667 mL	9.3336 mL	18.6672 mL
5 mM	0.3733 mL	1.8667 mL	3.7334 mL
10 mM	0.1867 mL	0.9334 mL	1.8667 mL
50 mM	0.0373 mL	0.1867 mL	0.3733 mL

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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

Kluge AF, et al. Novel highly selective inhibitors of ubiquitin specific protease 30 (USP30) accelerate mitophagy. *Bioorg Med Chem Lett*. 2018 Aug 15;28(15):2655-2659.

Chen G, et al. Increased FUN14 domain containing 1 (FUNDC1) ubiquitination level inhibits mitophagy and alleviates the injury in hypoxia-induced trophoblast cells. *Bioengineered*. 2022 Feb;13(2):3620-3633.

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

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