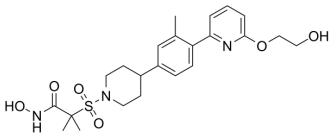
MMP3 inhibitor 1

Cat. No.:	HY-114418
CAS No.:	312930-75-9
Molecular Formula:	$C_{23}H_{31}N_3O_6S$
Molecular Weight:	477.57
Target:	MMP
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 : 100 mg/mL (209.39 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.0939 mL	10.4697 mL	20.9393 mL
5 mM	0.4188 mL	2.0939 mL	4.1879 mL
10 mM	0.2094 mL	1.0470 mL	2.0939 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: 2.5 mg/mL (5.23 mM); Clear solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 2.5 mg/mL (5.23 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

MMP3 inhibitor 1 is a potent and highly selective MMP-3 inhibitor with an IC_{50} of 1 nM[1].

IC_{50} & Target

MMP-3 1 nM (IC_{50})	MMP-2 529 nM (IC_{50})	MMP-9 2420 nM (IC_{50})	MMP-1 14000 nM (IC_{50})
MMP-14 20100 nM (IC_{50})			

In Vitro

MMP3 inhibitor 1 (Compound 27) inhibits MMP-1, MMP-2, MMP-9, and MMP-14 with IC_{50}s of 14000, 529, 2420, and 20100 nM, respectively[1].

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

CUSTOMER VALIDATION

- Int J Mol Sci. 2023 Nov 15, 24(22), 16363.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Whitlock GA, et al. A novel series of highly selective inhibitors of MMP-3. Bioorg Med Chem Lett. 2007 Dec 15;17(24):6750-3.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA