SBC-115076

Cat. No.: HY-12402

CAS No.: 489415-96-5

Molecular Formula: $C_{31}H_{33}N_3O_5$

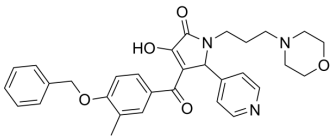
Molecular Weight: 527.61

Target: Ser/Thr Protease

Pathway: Metabolic Enzyme/Protease

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	2 years
	-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (189.53 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	1.8953 mL	9.4767 mL	18.9534 mL
5 mM	0.3791 mL	1.8953 mL	3.7907 mL
10 mM	0.1895 mL	0.9477 mL	1.8953 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 (4.74 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (4.74 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (4.74 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

SBC-115076 is a potent proprotein convertase subtilisin/kexin type 9 (PCSK9) inhibitor. PCSK9 is a proprotein convertase, which plays a crucial role in LDL receptor metabolism[1][2].

In Vivo

SBC-115076 (4 mg/kg; s.c.; daily for 3 weeks) reduces obesity and dyslipidemia, as well as improves insulin sensitivity in HFD-fed rats[1].

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

Animal Model:	Female Wistar rats (high-fat diet (HFD)- fed)[1]
Dosage:	4 mg/kg
Administration:	S.c.; daily for 3 weeks
Result:	Superior to atorvastatin in instigating weight loss, cholesterol reduction, and attenuation of mitochondrial oxidative stress in oxidative muscle fibers of obese female rats.

CUSTOMER VALIDATION

- Pharmaceutics. 2023 Sep 23, 15(10), 2377.

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REFERENCES

[1]. Chanisa Thonusin, et al. The comparative effects of high dose atorvastatin and proprotein convertase subtilisin/kexin type 9 inhibitor on the mitochondria of oxidative muscle fibers in obese-insulin resistant female rats. Toxicol Appl Pharmacol. 2019 Nov 1;382:114741.

[2]. Wiciński M, et al. PCSK9 signaling pathways and their potential importance in clinical practice. EPMA J. 2017;8(4):391-402. Published 2017 Aug 14.

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