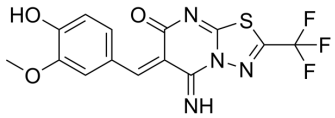
SRPIN803

Cat. No.:	HY-114653
CAS No.:	380572-02-1
Molecular Formula:	$C_{14}H_9F_3N_4O_3S$
Molecular Weight:	370.31
Target:	Casein Kinase; SRPK
Pathway:	Cell Cycle/DNA Damage; Stem Cell/Wnt
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 (270.04 mM; ultrasonic and warming and heat to 80°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.7004 mL	13.5022 mL	27.0044 mL
	5 mM	0.5401 mL	2.7004 mL	5.4009 mL
	10 mM	0.2700 mL	1.3502 mL	2.7004 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 (6.75 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

SRPIN803 is a potent CK2 and SRPK1 dual inhibitor, with IC_{50}s of 203 nM and 2.4 μM, respectively. SRPIN803 exhibits antiangiogenic activity. SRPIN803 can be used for the research of age-related macular degeneration[1][2][3].

IC_{50} & Target

CK2	SRPK1
203 nM (IC_{50})	2.4 μM (IC_{50})

In Vitro

SRPIN803 inhibits the activity of SRPK1 toward LBRNt (62-92), with an IC_{50} of 7.5 μM, while the c(RGDyK)-conjugated compounds completely abolishes its inhibitory activity[2].

SRPIN803 has slightly cytostatic activity against Hcc827, PC3, and U87 (GI_{50}=80-98 μM)[2].

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

In Vivo

SRPIN803 (topical administration of eye ointment) significantly inhibits choroidal neovascularization in a mouse model of

	age-related macular degeneration[2]. SRPIN803 (100 μM; 72 h) inhibit zebrafish angiogenesis[2]. SRPIN803 (4.6 nL of 10 μM; microinjection; 72 h) block angiogenesis in the developing embryo at the one-cell stage of zebrafish[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Leonidis G, et, al. Synthesis and Biological Evaluation of a c(RGDyK) Peptide Conjugate of SRPIN803. ACS Omega. 2021 Oct 14;6(42):28379-28393.

[2]. Vedove AD, et, al. A novel class of selective CK2 inhibitors targeting its open hinge conformation. Eur J Med Chem. 2020 Jun 1;195:112267.

[3]. Morooka S, et, al. Identification of a Dual Inhibitor of SRPK1 and CK2 That Attenuates Pathological Angiogenesis of Macular Degeneration in Mice.

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

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