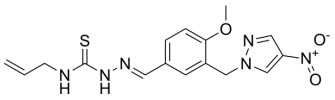
RK-9123016

Cat. No.:	HY-111522
CAS No.:	955900-27-3
Molecular Formula:	$C_{16}H_{18}N_6O_3S$
Molecular Weight:	374.42
Target:	Sirtuin; c-Myc
Pathway:	Cell Cycle/DNA Damage; Epigenetics; Apoptosis
Storage:	Powder -20°C 3 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 12.5 mg/mL (33.38 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.6708 mL	13.3540 mL	26.7080 mL
	5 mM	0.5342 mL	2.6708 mL	5.3416 mL
	10 mM	0.2671 mL	1.3354 mL	2.6708 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 1.25 mg/mL (3.34 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

RK-9123016 is a potent inhibitor of SIRT2. RK-9123016 inhibits the enzymatic activity of SIRT2 with an IC_{50} value of 0.18 μM but not other human sirtuin members including SIRT1 and SIRT3 at 100 μM. RK-9123016 increases the acetylation level of eukaryotic translation initiation factor 5A (eIF5A), a physiological substrate of SIRT2, and reduces cell viability of human breast cancer cells accompanied with a decrease in c-Myc expression[1].

IC_{50} & Target

SIRT2
0.18 μM (IC_{50})

REFERENCES

[1]. Asad Ali Shah, et al. Identification of a Selective SIRT2 Inhibitor and Its Anti-breast Cancer Activity. Biol Pharm Bull. 2016;39(10):1739-1742.

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

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