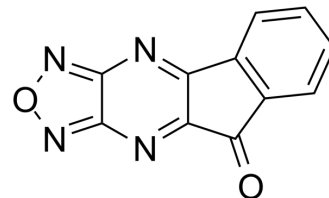


SMER3

Cat. No.:	HY-10949		
CAS No.:	67200-34-4		
Molecular Formula:	C ₁₁ H ₄ N ₄ O ₂		
Molecular Weight:	224.18		
Target:	E1/E2/E3 Enzyme		
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 : 12.5 mg/mL (55.76 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	4.4607 mL	22.3035 mL	44.6070 mL
		5 mM	0.8921 mL	4.4607 mL	8.9214 mL
10 mM		0.4461 mL	2.2304 mL	4.4607 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: 1.25 mg/mL (5.58 mM); Suspended solution; Need ultrasonic				

BIOLOGICAL ACTIVITY

Description	SMER3, a Rapamycin enhancer, is a selective Skp1-Cullin-F-box (SCF) ^{Met30} ubiquitin ligase inhibitor. SMER3 enhances Rapamycin's growth inhibitory effect by inhibition of SCF ^{Met30} [1].
In Vitro	<p>In yeast cells, Met4 ubiquitination is blocked in cells exposed to SMER3 (0-60 μM). The met4Δ cells are less susceptible to growth inhibition by SMER3^[1].</p> <p>Addition of SMER3 to the ligase reactions inhibited ubiquitination of Met4 by SCF^{Met30} in a dose-dependent manner. SMER3 significantly inhibits the binding of Met30 to Skp1, and does not affect the Skp1 and Met30 protein levels^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

REFERENCES

[1]. Mariam Aghajan, et al. Chemical genetics screen for enhancers of rapamycin identifies a specific inhibitor of an SCF family E3 ubiquitin ligase. Nat Biotechnol. 2010 Jul;28(7):738-42.

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