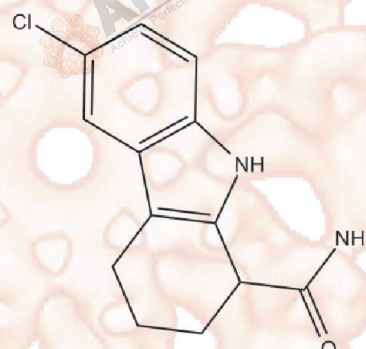


Product Data Sheet

EX 527 (SEN0014196)

Cat. No.:	A4181
CAS No.:	49843-98-3
Formula:	C ₁₃ H ₁₃ ClN ₂ O
M.Wt:	248.71
Synonyms:	EX-527, SIRT1 Inhibitor III, SEN0014196, EX527
Target:	Chromatin/Epigenetics
Pathway:	Sirtuin
Storage:	Store at -20°C



Solvent & Solubility

insoluble in H₂O; ≥12.43 mg/mL in DMSO; ≥25.45 mg/mL in EtOH with ultrasonic

In Vitro	Preparing Stock Solutions	Mass			
		Solvent Concentration	1mg	5mg	10mg
		1 mM	4.0207 mL	20.1037 mL	40.2075 mL
		5 mM	0.8041 mL	4.0207 mL	8.0415 mL
		10 mM	0.4021 mL	2.0104 mL	4.0207 mL

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

Biological Activity

Shortsummary	SIRT1 inhibitor			
IC ₅₀ & Target	98 nM (SIRT1)			
In Vitro	Cell Viability Assay			
	<table border="1"> <tr> <td>Cell Line:</td> <td>NCI-H460, MCF-7, U-2 OS and HMEC cells</td> </tr> <tr> <td>Preparation method:</td> <td>The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20 °C for several months.</td> </tr> </table>	Cell Line:	NCI-H460, MCF-7, U-2 OS and HMEC cells	Preparation method:
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	Reacting conditions:	1 μ M; 48 or 72 hrs
	Applications:	In cells treated with Etoposide, inhibition of SIRT1 catalytic activity by EX 527 had no effect on cell growth, viability or p53-controlled gene expression.
In Vivo	Animal experiment	
	Animal models:	Male SD rats
	Dosage form:	1 to 5 ~ 10 μ g in a total volume of 5 μ L; intracerebroventricular injection
	Applications:	EX 527 (~ 10 μ g) increased hypothalamic acetyl-p53 levels by inhibiting hypothalamic SIRT1 activity.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

1. Tian L, Cao W, et al. "Pretreatment with Tilianin improves mitochondrial energy metabolism and oxidative stress in rats with myocardial ischemia/reperfusion injury via AMPK/SIRT1/PGC-1 alpha signaling pathway." J Pharmacol Sci. 2019 Apr;139(4):352-360. PMID:30910451

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References

[1]. Jonathan M. Solomon, Rao Pasupuleti, Lei Xu, Thomas McDonagh, Rory Curtis, Peter S. DiStefano, L. Julie Huber. Inhibition of SIRT1 Catalytic Activity Increases p53 Acetylation but Does Not Alter Cell Survival following DNA Damage. Molecular Cellular Biology January 2006 vol. 26 no. 1 28-38.

[2]. Velásquez DA, Martínez G, Romero A, Vázquez MJ, Boit KD, Dopeso-Reyes IG, López M, Vidal A, Nogueiras R, Diéguez C. The central Sirtuin 1/p53 pathway is essential for the orexigenic action of ghrelin. Diabetes. 2011 Apr;60(4):1177-85.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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