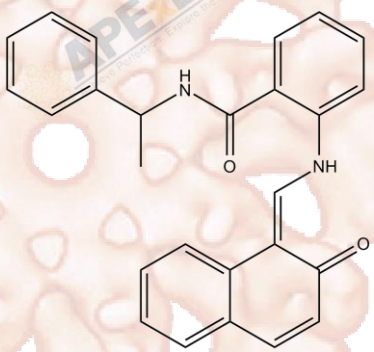
Product Data Sheet

Sirtinol

Cat. No.: A4183
CAS No.: 410536-97-9
Formula: C26H22N2O2
M.Wt: 394.47
Synonyms:
Target: Chromatin/Epigenetics
Pathway: Sirtuin
Storage: Store at -20°C



Solvent & Solubility

In Vitro

insoluble in H2O; insoluble in EtOH; ⩾19.7 mg/mL in DMSO

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	2.5350 mL	12.6752 mL	25.3505 mL
5 mM	0.5070 mL	2.5350 mL	5.0701 mL
10 mM	0.2535 mL	1.2675 mL	2.5350 mL

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

Biological Activity

Shortsummary	SIRT inhibitor
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	LNCaP, 22Rv1, DU145 and PC3 cells
Preparation method:	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.
Reacting conditions:	30 or 120 μM; 24 or 48 hrs

	Applications:	Sirtinol (30 and 120 μM) treatment for 24 or 48 hrs significantly decreased the growth and viability of the entire PCa cell lines tested.
In Vivo	**Animal experiment**	
	Animal models:	Male SD rats subjected to trauma-hemorrhage
	Dosage form:	1 mg/kg; i.v.
	Applications:	At the dose of 1 mg/kg, Sirtinol attenuated pro-inflammatory cytokine production and protected against hepatic injury following trauma-hemorrhage in male SD rats.
	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

See more customer validations on www.apexbt.com.

References

[1]. Grozinger CM, Chao ED, Blackwell HE, Moazed D, Schreiber SL. Identification of a class of small molecule inhibitors of the sirtuin family of NAD-dependent deacetylases by phenotypic screening. J Biol Chem. 2001 Oct 19;276(42):38837-43.

[2]. Jung-Hynes B, Nihal M, Zhong W, Ahmad N. Role of sirtuin histone deacetylase SIRT1 in prostate cancer. A target for prostate cancer management via its inhibition? J Biol Chem. 2009 Feb 6;284(6):3823-32.

[3]. Liu FC, Day YJ, Liou JT, Lau YT, Yu HP. Sirtinol attenuates hepatic injury and pro-inflammatory cytokine production following trauma-hemorrhage in male Sprague-Dawley rats. Acta Anaesthesiol Scand. 2008 May;52(5):635-40.

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 APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm 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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