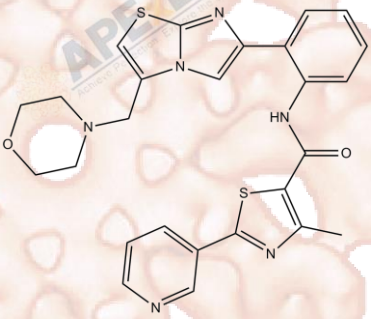
Product Data Sheet

SRT2104 (GSK2245840)

Cat. No.: A3821
CAS No.: 1093403-33-8
Formula: C26H24N6O2S2
M.Wt: 516.64
Synonyms:
Target: Chromatin/Epigenetics
Pathway: Sirtuin
Storage: Store at -20°C



Solvent & Solubility

In Vitro

insoluble in H2O; insoluble in EtOH; ⩾6.46 mg/mL in DMSO with gentle warming

Preparing Stock Solutions

Concentration \ Mass / Solvent	1mg	5mg	10mg
1 mM	1.9356 mL	9.6779 mL	19.3558 mL
5 mM	0.3871 mL	1.9356 mL	3.8712 mL
10 mM	0.1936 mL	0.9678 mL	1.9356 mL

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

Biological Activity

Shortsummary	SIRT1 activator,selective
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	C2C12 myoblasts
Preparation method：	Soluble in DMSO. 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:	3 μM, 24 h

	Applications:	In C2C12 myoblasts stably transfected with small hairpin RNA to knock-down SIRT1, SRT2104 increased AP activity, a marker for osteogenic differentiation. This effect was totally dependent on SIRT1 expression. SRT2104 treatment increased mitochondrial content and suppressed the inflammatory response.
In Vivo	**Animal experiment**	
	Animal models:	Male C57BL/6J mice
	Dosage form:	Oral administration, 100 mg/kg, 6 weeks
	Applications:	In male C57BL/6J mice, SRT2104 (100 mg/kg, p.o.) treatment improved whole-body physiology and extended lifespan and enhanced bone mineral density, motor coordination, and insulin sensitivity and decreased inflammation in mice fed a standard diet. Short-term SRT2104 administration preserved bone and muscle mass in an experimental model of atrophy.
	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. Dai Y, Chen T, et al. "SIRT1 activates the expression offetal hemoglobin genes." Am J Hematol. 2017 Aug 4.PMID:28776729

See more customer validations on www.apexbt.com.

References

[1]. Mercken E M, Mitchell S J, Martin‐Montalvo A, et al. SRT2104 extends survival of male mice on a standard diet and preserves bone and muscle mass[J]. Aging Cell, 2014, 13(5): 787-796.

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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