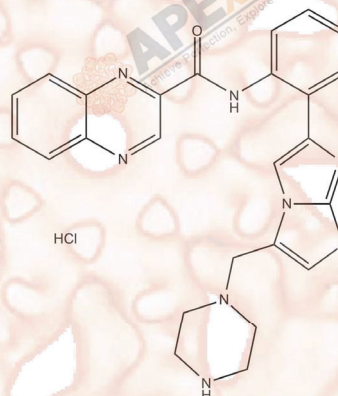


# Product Data Sheet

## SRT1720 HCl

<b>Cat. No.:</b>	A4180
<b>CAS No.:</b>	1001645-58-4
<b>Formula:</b>	C <sub>25</sub> H <sub>23</sub> N <sub>7</sub> O <sub>5</sub> ·HCl
<b>M.Wt:</b>	506.02
<b>Synonyms:</b>	SRT-1720, SRT 1720, SRT 1720 Hydrochloride
<b>Target:</b>	Chromatin/Epigenetics
<b>Pathway:</b>	Sirtuin
<b>Storage:</b>	Store at -20°C



### Solvent & Solubility

≥25.3 mg/mL in DMSO, insoluble in EtOH, ≥15.37 mg/mL in H<sub>2</sub>O with ultrasonic and warming

In Vitro

Preparing	Solvent	Mass	1mg	5mg	10mg
		Concentration			
Stock Solutions	1 mM		1.9762 mL	9.8810 mL	19.7621 mL
	5 mM		0.3952 mL	1.9762 mL	3.9524 mL
	10 mM		0.1976 mL	0.9881 mL	1.9762 mL

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

### Biological Activity

Shortsummary

SIRT1 activator

IC<sub>50</sub> & Target0.16 μM (EC<sub>50</sub>) (SIRT1)

In Vitro

#### Cell Viability Assay

Cell Line: MDA-MB-231 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: Below a concentration of 5 μM, 24h

Applications: SRT1720 is a SIRT1 activator. It increased the VEGF concentration by about

30% relative to the control, suggesting that SRT1720 might promote the angiogenesis of tumors.

#### Animal experiment

Animal models:	BALB/c mice (5-week-old females) injected with 4T1 cells
Dosage form:	From Day 2 before tumor implantation, SRT1720 (100 mg/kg body weight) was given to the mouse 5 times per week. The size of the tumors was measured on Days 4, 8, 12, 16 and 20. The primary tumor was removed on Day 21 and was weighed and frozen at -20°C. On Day 28, the mice were sacrificed and the lungs were intratracheally fixed with a Bouin's solution for 24 h.
Applications:	SRT1720 did not substantially affect the size and weight of primary tumors, but dramatically increased lung metastasis by about 150%.
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.

In Vivo

## Product Citations

1. Zurlo G, Piquereau J, et al. "Sirtuin 1 regulates pulmonary artery smooth muscle cell proliferation: role in pulmonary arterial hypertension." J Hypertens. 2018 May;36(5):1164-1177.PMID:29369849
2. Cheng CY, Gutierrez NM, et al. "Host sirtuin 1 regulates mycobacterial immunopathogenesis and represents a therapeutic target against tuberculosis." Sci Immunol. 2017 Mar;2(9). pii: eaaj1789.PMID:28707004
3. Wang, Yi, et al. "Specific turn-on fluorescent probe with aggregation-induced emission characteristics for SIRT1 modulator screening and living-cell imaging." Analytical chemistry (2015).PMID:25903518

See more customer validations on [www.apexbt.com](http://www.apexbt.com).

## References

- [1] Suzuki K, Hayashi R, Ichikawa T, et al. SRT1720, a SIRT1 activator, promotes tumor cell migration, and lung metastasis of breast cancer in mice. Oncology reports, 2012, 27(6): 1726-1732.

## 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. 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.

**APEX BIO Technology**

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