

## **Product** Data Sheet

## AC-93253

Cat. No.:HY-118343CAS No.:108527-83-9Molecular Formula: $C_{23}H_{25}IN_2S$ Molecular Weight:488.43Target:Sirtuin

Pathway: Cell Cycle/DNA Damage; Epigenetics

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

IC<sub>50</sub> & Target

Description AC-93253 is a selective, potent SIRT2 inhibitor. AC93253 can inhibit SIRT2 with an IC<sub>50</sub> value of 6  $\mu$ M. AC93253 can be used for the research of tumors<sup>[1]</sup>.

SIRT1 SIRT2 SIRT3

45.3  $\mu$ M (IC<sub>50</sub>) 6  $\mu$ M (IC<sub>50</sub>) 24.6  $\mu$ M (IC<sub>50</sub>)

In Vitro AC93253 can inhibit SIRT1, SIRT2 and SIRT3 with IC $_{50}$  values of 45.3  $\mu$ M, 6  $\mu$ M and 24.6  $\mu$ M, respectively [1].

AC-93253 (0, 2, 5, 10  $\mu$ M; 16 h) significantly enhanced the acetylation of tubulin, p53, and histone H4<sup>[1]</sup>.

 $AC-93253\ exhibits\ selective\ cytotoxicity\ towards\ four\ tumor\ cell\ lines\ in\ a\ single\ agent\ with\ IC_{50}\ values\ ranging\ from\ 10\ to$ 

100 nM<sup>[1]</sup>.

AC-93253 significantly triggered apoptosis [1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis $^{[1]}$ 

Cell Line:	NCI-H460 cells, HeLa cells
Concentration:	0, 2, 5, 10 μΜ
Incubation Time:	16 h
Result:	Increased the acetylation levels of a-tubulin in a dose-dependent manner. Increased the level of histone protein and p53.

## **REFERENCES**

[1]. Zhang, Yingjia et al. Identification of a small molecule SIRT2 inhibitor with selective tumor cytotoxicity. Biochemical and biophysical research communications vol. 386,4 (2009): 729-33.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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