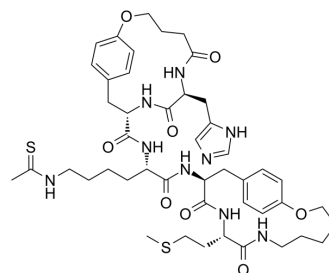


SIRT1/2/3-IN-1

Cat. No.:	HY-150568
CAS No.:	2413212-06-1
Molecular Formula:	C ₄₆ H ₆₃ N ₉ O ₈ S ₂
Molecular Weight:	934.18
Target:	Sirtuin
Pathway:	Cell Cycle/DNA Damage; Epigenetics
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	SIRT1/2/3-IN-1 (compound 10) is a highly potent, selective and cell permeable inhibitor of SIRT1, SIRT2 and SIRT3 with IC ₅₀ s of 0.54, 0.253, and 0.72 μM, respectively. SIRT1/2/3-IN-1 (compound 10) can be used for research of cancer ^[1] .																
IC₅₀ & Target	IC ₅₀ : 0.54 μM (SIRT1), 0.253 μM (SIRT2), and 0.72 μM (SIRT3) ^[1]																
In Vitro	<p>SIRT1/2/3-IN-1 (compound 10) possesses cell growth inhibition to cancer cells with time- and concentration-dependently^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Western Blot Analysis^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>HCT116 human colon cancer cells</td> </tr> <tr> <td>Concentration:</td> <td>0, 0.5, 2, 10, 50, and 100 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>8 h</td> </tr> <tr> <td>Result:</td> <td>Inhibited deacetylation of the K382-acetylated tumor suppresser protein p53.</td> </tr> </table> <p>Cell Proliferation Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>Human MCF-7 breast cancer cells and human SK-MEL-2 melanoma cells</td> </tr> <tr> <td>Concentration:</td> <td>0, 5, 12.5, 25, 50 or 100 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 h, 48 h or 72 h</td> </tr> <tr> <td>Result:</td> <td>Concentration-dependently inhibited cell growth.</td> </tr> </table>	Cell Line:	HCT116 human colon cancer cells	Concentration:	0, 0.5, 2, 10, 50, and 100 μM	Incubation Time:	8 h	Result:	Inhibited deacetylation of the K382-acetylated tumor suppresser protein p53.	Cell Line:	Human MCF-7 breast cancer cells and human SK-MEL-2 melanoma cells	Concentration:	0, 5, 12.5, 25, 50 or 100 μM	Incubation Time:	24 h, 48 h or 72 h	Result:	Concentration-dependently inhibited cell growth.
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REFERENCES

[1]. Li R, et al. A bicyclic pentapeptide-based highly potent and selective pan-SIRT1/2/3 inhibitor harboring Nε-thioacetyl-L-lysine[J]. Bioorganic & Medicinal Chemistry, 2020, 28(7):115356.

Caution: Product has not been fully validated for medical applications. For research use only.

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