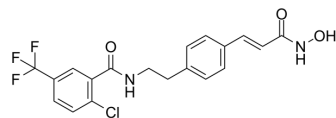


DNMT/HDAC-IN-1

Cat. No.:	HY-158075
CAS No.:	2095619-17-1
Molecular Formula:	C ₁₉ H ₁₆ ClF ₃ N ₂ O ₃
Molecular Weight:	412.79
Target:	HDAC; DNA Methyltransferase
Pathway:	Cell Cycle/DNA Damage; Epigenetics
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	DNMT/HDAC-IN-1 (Compound 15a) is a dual DNMT and HDAC inhibitor with IC ₅₀ values for HDAC1 and HDAC6 are 56.84 nM and 17.39 nM respectively. DNMT/HDAC-IN-1 can induce apoptosis and be used in tumor research.																	
IC₅₀ & Target	HDAC1 56.84 nM (IC ₅₀)	HDAC6 17.39 nM (IC ₅₀)																
In Vitro	<p>DNMT/HDAC-IN-1 significantly suppress K562 and U937 proliferation with IC₅₀ values of 2.85 and 1.06 mM, respectively^[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>U937 cells</td> </tr> <tr> <td>Concentration:</td> <td>0, 1, 2.5, 5 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>12 h</td> </tr> <tr> <td>Result:</td> <td>induced histone H3K9 and histone H4K8 acetylation and increased P16 expression.</td> </tr> </table> <p>Apoptosis Analysis^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>U937 cells</td> </tr> <tr> <td>Concentration:</td> <td>2.5, 5, 10 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>36 h</td> </tr> <tr> <td>Result:</td> <td>induced apoptosis in U937 cells.</td> </tr> </table>		Cell Line:	U937 cells	Concentration:	0, 1, 2.5, 5 μM	Incubation Time:	12 h	Result:	induced histone H3K9 and histone H4K8 acetylation and increased P16 expression.	Cell Line:	U937 cells	Concentration:	2.5, 5, 10 μM	Incubation Time:	36 h	Result:	induced apoptosis in U937 cells.
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REFERENCES

[1]. Yuan Z, et al. Design, synthesis and anticancer potential of NSC-319745 hydroxamic acid derivatives as DNMT and HDAC inhibitors. *Eur J Med Chem.* 2017 Jul 7;134:281-292.

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

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