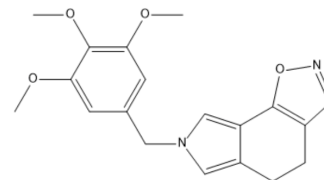


Tubulin polymerization-IN-37

Cat. No.:	HY-151398
CAS No.:	2011784-92-0
Molecular Formula:	C ₁₉ H ₂₀ N ₂ O ₄
Molecular Weight:	340.37
Target:	Microtubule/Tubulin
Pathway:	Cell Cycle/DNA Damage; Cytoskeleton
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Tubulin polymerization-IN-37 is a tubulin polymerization inhibitor (IC ₅₀ : 2.3 μM). Tubulin polymerization-IN-37 binds to the colchicine site of tubulin and inhibits colchicine binding. Tubulin polymerization-IN-37 can be used in the research of cancers, such as lymphomas ^[1] .																
IC₅₀ & Target	Tubulin polymerization ^[1]																
In Vitro	<p>Tubulin polymerization-IN-37 (compound 2f, 1 μM, 72 h) inhibits proliferation of lymphoma cells below 50%^[1].</p> <p>Tubulin polymerization-IN-37 (50 and 500 nM, 24-72 h) induces cell apoptosis and arrests cell in G2/M phase in VL51 and MINO cells^[1].</p> <p>Tubulin polymerization-IN-37 (5 μM) inhibits colchicine binding to tubulin by 80%^[1].</p> <p>Tubulin polymerization-IN-37 shows cytotoxicity against MCF-7 cells (IC₅₀: 0.21 μM)^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Proliferation Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>VL51, MINO, HBL1, SU-DHL-10 cells.</td> </tr> <tr> <td>Concentration:</td> <td>0-10 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>72 h</td> </tr> <tr> <td>Result:</td> <td>Inhibited cell proliferation to 28.1%, 8.6%, 7.3%, 13.8% at 1 μM, respectively. IC₅₀s: 0.12, 0.07, 0.08, 0.07 μM, respectively.</td> </tr> </table> <p>Cell Cycle Analysis^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>VL51 and MINO cells</td> </tr> <tr> <td>Concentration:</td> <td>50 and 500 nM</td> </tr> <tr> <td>Incubation Time:</td> <td>24, 48 and 72 h</td> </tr> <tr> <td>Result:</td> <td>Arrested cell in G2/M phase.</td> </tr> </table>	Cell Line:	VL51, MINO, HBL1, SU-DHL-10 cells.	Concentration:	0-10 μM	Incubation Time:	72 h	Result:	Inhibited cell proliferation to 28.1%, 8.6%, 7.3%, 13.8% at 1 μM, respectively. IC ₅₀ s: 0.12, 0.07, 0.08, 0.07 μM, respectively.	Cell Line:	VL51 and MINO cells	Concentration:	50 and 500 nM	Incubation Time:	24, 48 and 72 h	Result:	Arrested cell in G2/M phase.
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REFERENCES

[1]. Michael D Wendt, et al. Development of [1,2]oxazoloisoindoles tubulin polymerization inhibitors: Further chemical modifications and potential therapeutic effects against lymphomas. J Med Chem. 2006 Feb; 49(3): 1165-81.

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

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