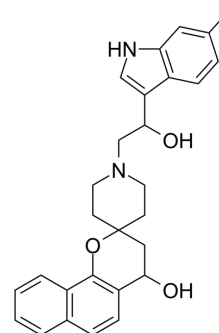


JBC117

Cat. No.:	HY-157891
CAS No.:	1214531-21-1
Molecular Formula:	C ₂₈ H ₃₀ N ₂ O ₃
Molecular Weight:	442.55
Target:	Apoptosis
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	JBC117 is a novel anticancer lead compound targeting Pygo2 PHD. JBC117 can effectively antagonize the cell effect of β -catenin-dependent activity and inhibit the migration and invasion of cancer cells. JBC117 can induce apoptosis ^[1] .																
In Vitro	<p>JBC117 (20 μM, 24 h) inhibits the growth of colon cancer (HCT116) and lung cancer (A549) with IC₅₀ values of 2.6 and 3.3 μM, respectively^[1].</p> <p>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, A549</td> </tr> <tr> <td>Concentration:</td> <td>5, 10, 20 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>72 h</td> </tr> <tr> <td>Result:</td> <td>Downregulated the expression level of Wnt downstream target genes, including Axin2, c-myc and cyclin D1.</td> </tr> </table> <p>Cell Invasion Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>HCT116, A549</td> </tr> <tr> <td>Concentration:</td> <td>20 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 h</td> </tr> <tr> <td>Result:</td> <td>Decreased the ability to migrate and invasion in a dose-dependent manner.</td> </tr> </table>	Cell Line:	HCT116, A549	Concentration:	5, 10, 20 μ M	Incubation Time:	72 h	Result:	Downregulated the expression level of Wnt downstream target genes, including Axin2, c-myc and cyclin D1.	Cell Line:	HCT116, A549	Concentration:	20 μ M	Incubation Time:	24 h	Result:	Decreased the ability to migrate and invasion in a dose-dependent manner.
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In Vivo	<p>JBC117 (20 mg/kg/ day, subcutaneously injected for 14 days) shows antitumor activity in mouse xenotransplantation models of colon cancer and lung cancer^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Mouse xenograft models of colon and lung cancer^[1]</td> </tr> <tr> <td>Dosage:</td> <td>20 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>s.c. for 14 days</td> </tr> </table>	Animal Model:	Mouse xenograft models of colon and lung cancer ^[1]	Dosage:	20 mg/kg	Administration:	s.c. for 14 days										
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Result:	Reduced colon and lung tumor growth by 65% and 93%, respectively. Increased apoptosis in the tumor sections.
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REFERENCES

[1]. Ali F, et al. Logical design of an anti-cancer agent targeting the plant homeodomain in Pygopus2. Cancer Sci. 2016 Sep;107(9):1321-8.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA