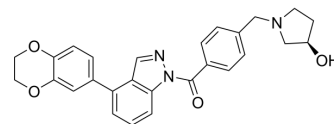


PD-1/PD-L1-IN-43

Cat. No.:	HY-163534
Molecular Formula:	C ₂₇ H ₂₅ N ₃ O ₄
Molecular Weight:	455.51
Target:	PD-1/PD-L1
Pathway:	Immunology/Inflammation
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	<p>PD-1/PD-L1-IN-43 (compound Z13) is a small-molecule inhibitors targeting the PD-1/PD-L1 interaction. PD-1/PD-L1-IN-43 exhibits potent in vivo antitumor efficacy against B16-F10 melanoma. PD-1/PD-L1-IN-43 inhibits tumor growth by blocking the interaction between PD-1 and PD-L1. PD-1/PD-L1-IN-43 can be used in anti-tumor studies^[1].</p>								
In Vitro	<p>PD-1/PD-L1-IN-43 (0 - 20 μM; 48 h) can reactivate immunosuppressed Jurkat T cells to kill HepG2 cells in the cell co-culture system^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>HepG2/Jurkat co-culture cell model</td> </tr> <tr> <td>Concentration:</td> <td>0 - 20 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 h</td> </tr> <tr> <td>Result:</td> <td>Reduced the survival rate of HepG2 cells to 55.16% compared to the control group.</td> </tr> </table>	Cell Line:	HepG2/Jurkat co-culture cell model	Concentration:	0 - 20 μM	Incubation Time:	48 h	Result:	Reduced the survival rate of HepG2 cells to 55.16% compared to the control group.
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In Vivo	<p>PD-1/PD-L1-IN-43 (20 and 40 mg/kg; i.p.; everyday for 2 weeks) inhibits potently tumor growth in vivo by activating the tumor immune microenvironment in C57BL/6J male mice^[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 model of B16-F10 melanoma</td> </tr> <tr> <td>Dosage:</td> <td>20 and 40 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Intraperitoneal injection (i.p.)</td> </tr> <tr> <td>Result:</td> <td>The tumor growth inhibition values (TGI) of the treatment groups were 42.4 % and 52.6 % at doses of 20 and 40 mg/kg.</td> </tr> </table>	Animal Model:	mouse model of B16-F10 melanoma	Dosage:	20 and 40 mg/kg	Administration:	Intraperitoneal injection (i.p.)	Result:	The tumor growth inhibition values (TGI) of the treatment groups were 42.4 % and 52.6 % at doses of 20 and 40 mg/kg.
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REFERENCES

[1]. Xu C, et al. Discovery of 4-phenyl-1H-indazole derivatives as novel small-molecule inhibitors targeting the PD-1/PD-L1 interaction[J]. Bioorganic Chemistry, 2024: 107376.

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

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