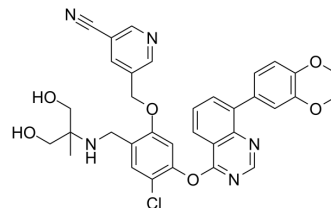


## PD-1/PD-L1-IN-24

<b>Cat. No.:</b>	HY-144649
<b>CAS No.:</b>	2667680-33-1
<b>Molecular Formula:</b>	C <sub>34</sub> H <sub>30</sub> ClN <sub>5</sub> O <sub>6</sub>
<b>Molecular Weight:</b>	640.08
<b>Target:</b>	PD-1/PD-L1
<b>Pathway:</b>	Immunology/Inflammation
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	PD-1/PD-L1-IN-24 is a highly potent PD-1/PD-L1 inhibitor with IC <sub>50</sub> value of 1.57 nM. PD-1/PD-L1-IN-24 can restore T-cell function at the cellular level by significantly elevating the IFN-γ level. PD-1/PD-L1-IN-24 has low toxicity on the PBMCs <sup>[1]</sup> .								
<b>IC<sub>50</sub> &amp; Target</b>	IC <sub>50</sub> : 1.57 nM (PD-1/PD-L1) <sup>[1]</sup>								
<b>In Vitro</b>	<p>PD-1/PD-L1-IN-24 (compound 39) (0-10 μM; 6 hours) significantly releases PD-L1-mediated inhibition of PD-1-expressing Jurkat T cells at the concentration of 10 μM<sup>[1]</sup>.</p> <p>PD-1/PD-L1-IN-24 (0.003-20 μM; 72 hours) exhibits no significant toxicity at concentrations ranging from 0.003 to 2.22 μM, and the IC<sub>50</sub> is 12.42 μM<sup>[1]</sup>.</p> <p>PD-1/PD-L1-IN-24 (0.082, 0.247, 0.741 and 2.222 μM; 72 hours) significantly elevates the secretion of IFN-γ with a dose-dependent manner in T cell-tumor co-culture cells<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Cytotoxicity Assay</p> <table border="1"> <tr> <td>Cell Line:</td> <td>PBMC<sup>[1]</sup></td> </tr> <tr> <td>Concentration:</td> <td>0.003, 0.0091, 0.027, 0.082, 0.247, 0.741, 2.222, 6.67 and 20 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>72 hours</td> </tr> <tr> <td>Result:</td> <td>No significant toxicity was observed at concentrations ranging from 0.003 to 2.22 μM, and the IC<sub>50</sub> was 12.42 μM.</td> </tr> </table>	Cell Line:	PBMC <sup>[1]</sup>	Concentration:	0.003, 0.0091, 0.027, 0.082, 0.247, 0.741, 2.222, 6.67 and 20 μM	Incubation Time:	72 hours	Result:	No significant toxicity was observed at concentrations ranging from 0.003 to 2.22 μM, and the IC <sub>50</sub> was 12.42 μM.
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### REFERENCES

[1]. Wang Y, Kun Huang, Gao Y, et al. Discovery of quinazoline derivatives as novel small-molecule inhibitors targeting the programmed cell death-1/programmed cell death-ligand 1 (PD-1/PD-L1) interaction. *Eur J Med Chem.* 2022;229:113998.

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

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