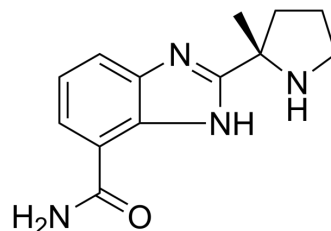


## PARP-2/1-IN-2

<b>Cat. No.:</b>	HY-105253
<b>CAS No.:</b>	912444-01-0
<b>Molecular Formula:</b>	C <sub>13</sub> H <sub>16</sub> N <sub>4</sub> O
<b>Molecular Weight:</b>	244.29
<b>Target:</b>	PARP
<b>Pathway:</b>	Cell Cycle/DNA Damage; Epigenetics
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	PARP-2/1-IN-2 (Compound 4a), the enantiomer of Veliparib (HY-10129), is a potent PARP inhibitor with K <sub>i</sub> s of 2 and 5 nM against PARP-2 and PARP-1, respectively. PARP-2/1-IN-2 has an EC <sub>50</sub> of 3 nM in a cell based assay of PARP activity <sup>[1]</sup> .									
<b>IC<sub>50</sub> &amp; Target</b>	PARP2 2 nM (K <sub>i</sub> )	PARP1 5 nM (K <sub>i</sub> )								
<b>In Vivo</b>	<p>PARP-2/1-IN-2 (Compound 4a) (25 or 50 mg/kg; i.p.) attenuates pain in Cisplatin (HY-17394) and Oxaliplatin (HY-17371)-induced neuropathy in mice<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td><b>Animal Model:</b></td> <td>Male C57BL6J mice, Cisplatin (HY-17394) and Oxaliplatin (HY-17371)-induced painful neuropathy models<sup>[1]</sup></td> </tr> <tr> <td><b>Dosage:</b></td> <td>25 mg/kg or 50 mg/kg</td> </tr> <tr> <td><b>Administration:</b></td> <td>Intraperitoneal injection, two days prior to treatment with Cisplatin or oxaliplatin, with administration continuing by i.p. injection along with the Cisplatin or oxaliplatin regimen (5 days, followed by 5 days of rest, for two weekly cycles)</td> </tr> <tr> <td><b>Result:</b></td> <td>Does not attenuate Cisplatin and Oxaliplatin-induced body weight loss. Does not Affect the decline in exploratory behavior associated with Cisplatin and Oxaliplatin Treatment. Attenuates mechanical allodynia in Cisplatin and Oxaliplatin-induced neuropathy. Attenuates thermal hyperalgesia in Cisplatin-induced neuropathy. Attenuates cold hyperalgesia associated with Oxaliplatin-induced neuropathy.</td> </tr> </table>		<b>Animal Model:</b>	Male C57BL6J mice, Cisplatin (HY-17394) and Oxaliplatin (HY-17371)-induced painful neuropathy models <sup>[1]</sup>	<b>Dosage:</b>	25 mg/kg or 50 mg/kg	<b>Administration:</b>	Intraperitoneal injection, two days prior to treatment with Cisplatin or oxaliplatin, with administration continuing by i.p. injection along with the Cisplatin or oxaliplatin regimen (5 days, followed by 5 days of rest, for two weekly cycles)	<b>Result:</b>	Does not attenuate Cisplatin and Oxaliplatin-induced body weight loss. Does not Affect the decline in exploratory behavior associated with Cisplatin and Oxaliplatin Treatment. Attenuates mechanical allodynia in Cisplatin and Oxaliplatin-induced neuropathy. Attenuates thermal hyperalgesia in Cisplatin-induced neuropathy. Attenuates cold hyperalgesia associated with Oxaliplatin-induced neuropathy.
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### REFERENCES

[1]. Ta LE, et al. A novel and selective poly (ADP-ribose) polymerase inhibitor ameliorates chemotherapy-induced painful neuropathy. PLoS One. 2013;8(1):e54161.

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

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