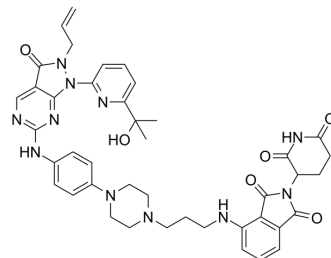


Pomalidomide-C3-adavosertib

Cat. No.:	HY-133618
CAS No.:	2414418-49-6
Molecular Formula:	C ₄₂ H ₄₅ N ₁₁ O ₆
Molecular Weight:	799.88
Target:	Wee1
Pathway:	Cell Cycle/DNA Damage
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Pomalidomide-C3-adavosertib is a rapid and selective Wee1 degrader (IC ₅₀ =3.58 nM). Pomalidomide-C3-adavosertib shows anti-cancer cell proliferation activity, and induces apoptosis ^[1] .																						
In Vitro	<p>Pomalidomide-C3-adavosertib (1 nM-10 μM; 24, 48, and 72 h) induces CRBN-dependent anti-proliferative effects and synergized with Olaparib^[1].</p> <p>Pomalidomide-C3-adavosertib (100 nM; 24 h) induces DNA damage, apoptosis, and deregulation of the G2/M checkpoint^[1].</p> <p>Pomalidomide-C3-adavosertib (1 nM-10 μM; 6 h) degrades Wee1 in MOLT4 cells^[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>OVCAR8, COV362, and Kuramochi cells</td> </tr> <tr> <td>Concentration:</td> <td>1 nM-10 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24, 48, and 72 hours</td> </tr> <tr> <td>Result:</td> <td>Degraded Wee1 in OVCAR8 cells, with maximal degradation observed at a 100 nM treatment.</td> </tr> </table> <p>Cell Cycle Analysis^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>MOLT4 cells</td> </tr> <tr> <td>Concentration:</td> <td>100 nM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 hours</td> </tr> <tr> <td>Result:</td> <td>Led to reduced pCDK1 Y15, increased apoptosis, and increased unrepaired DNA.</td> </tr> </table> <p>Western Blot Analysis^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>MOLT4 cells</td> </tr> <tr> <td>Concentration:</td> <td>1 nM-10 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>6 hours</td> </tr> </table>	Cell Line:	OVCAR8, COV362, and Kuramochi cells	Concentration:	1 nM-10 μM	Incubation Time:	24, 48, and 72 hours	Result:	Degraded Wee1 in OVCAR8 cells, with maximal degradation observed at a 100 nM treatment.	Cell Line:	MOLT4 cells	Concentration:	100 nM	Incubation Time:	24 hours	Result:	Led to reduced pCDK1 Y15, increased apoptosis, and increased unrepaired DNA.	Cell Line:	MOLT4 cells	Concentration:	1 nM-10 μM	Incubation Time:	6 hours
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Concentration:	1 nM-10 μM																						
Incubation Time:	6 hours																						

Result:	Degraded Wee1 after a 6-hour treatment in MOLT4 cells, and induced the downstream changes expected from Wee1 loss-including a decrease in phosphorylated cyclin-dependent kinase 1 (pCDK1) and an increase in pH 3.
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REFERENCES

[1]. Nathanael S. Gray, et al. Degradors of wee1 kinase. WO2020069105A1.

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

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