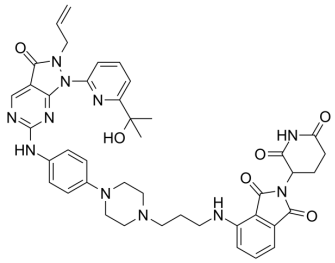
Pomalidomide-C3-adavosertib

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:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



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

Pomalidomide-C3-adavosertib (1 nM-10 μM; 24, 48, and 72 h) induces CRBN-dependent anti-proliferative effects and synergized with Olaparib[1].
Pomalidomide-C3-adavosertib (100 nM; 24 h) induces DNA damage, apoptosis, and deregulation of the G2/M checkpoint[1].
Pomalidomide-C3-adavosertib (1 nM-10 μM; 6 h) degrades Wee1 in MOLT4 cells[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Proliferation Assay[1]

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 Cycle Analysis[1]

Cell Line:	MOLT4 cells
Concentration:	100 nM
Incubation Time:	24 hours
Result:	Led to reduced pCDKl Y15, increased apoptosis, and increased unrepaired DNA.

Western Blot Analysis[1]

Cell Line:	MOLT4 cells
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.

REFERENCES

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

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