Wee1

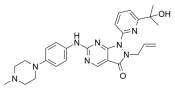
Wee1 is a nuclear kinase belonging to the Ser/Thr family of protein kinases in the fission yeast Schizosaccharomyces pombe (S. pombe). Wee1 has amolecular mass of 96 kDa and it is a key regulator of cell cycle progression. Wee1 influences cell size by inhibiting the entry into mitosis, through inhibiting Cdk1. Wee1 has homologues in many other organisms, including mammals. Wee1 inhibits Cdk1 by phosphorylating it on two different sites, Tyr15 and Thr14. Cdk1 is crucial for the cyclin-dependent passage of the various cell cycle checkpoints. At least three checkpoints exist for which the inhibition of Cdk1 by Wee1 is important: G_2/M checkpoint, Cell size checkpoint, DNA damage checkpoint. Wee1 is shown to phosphorylate histone H2B at tyrosine 37 residue which regulates global expression of histones.

Wee1 Inhibitors

Adavosertib
(AZD1775; MK-1775)

Cat. No.: HY-10993

Adavosertib (AZD-1775; MK-1775) is a potent **Wee1** inhibitor with an IC_{50} of 5.2 nM.

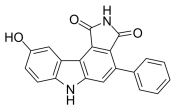


Purity: 99.97%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

PD 407824

Cat. No.: HY-18961

PD 407824 is a checkpoint kinase **Chk1** and **WEE1** inhibitor with IC_{50}s of 47 and 97 nM, respectively. PD 407824 is a chemical BMP sensitizer and increases the sensitivity of cells to sub-threshold amounts of BMP4.

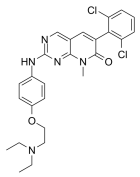


Purity: ≥98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

PD0166285

Cat. No.: HY-13925

PD0166285, a substrate of P-gp, is a **WEE1** inhibitor and a weak **Myt1** inhibitor with IC_{50} values of 24 and 72 nM, respectively. PD0166285 exhibits an IC_{50} of 3.433 μM for Chk1.

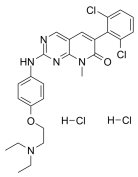


Purity: 99.46%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

PD0166285 dihydrochloride

Cat. No.: HY-13925A

PD0166285 dihydrochloride, a substrate of P-gp, is a **WEE1** inhibitor and a weak **Myt1** inhibitor with IC_{50} values of 24 and 72 nM, respectively. PD0166285 dihydrochloride exhibits an IC_{50} of 3.433 μM for Chk1.

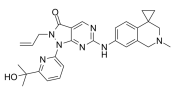


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

WEE1-IN-3

Cat. No.: HY-138239

WEE1-IN-3 is a potent **Wee1 kinase** inhibitor with an IC_{50} of <10 nM. WEE1-IN-3 has anticancer activities.

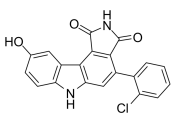


Purity: 98.03%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

WEE1-IN-4

Cat. No.: HY-108343

WEE1-IN-4 is a potent checkpoint **Wee1 kinase** inhibitor with an IC_{50} of 0.011 μM.



Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

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