

Data Sheet

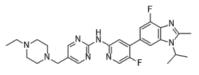
WWW.PROBECHEM.COM

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name : Bireociclib
Cat. No. : PC-24657
CAS No. : 1800506-48-2
Molecular Formula : C₂₇H₃₂F₂N₈
Molecular Weight : 506.61

Target : Cyclin-dependent Kinase (CDK)

Solubility : 10 mM in DMSO



Biological Activity

Bireociclib (XZP-3287) is a novel potent, selective cyclin-dependent kinase 4 and 6 (CDK4/6) inhibitor with IC50 of 2.7/16 nM respectively.

Bireociclib (XZP-3287) exhibits a significantly stronger selective inhibitory effect on CDK4 than on CDK6, but with additional inhibitory activity against CDK2 and CDK9.

Bireociclib (XZP-3287) reduced the phosphorylation level of the Rb protein at Ser780, thereby impeding tumor cell division and inducing cell cycle arrest at the G0/G1 phase.

Bireociclib (XZP-3287) resulted in significant tumor regression in a ZR-75-1-R tamoxifen-resistant breast cancer model.

References

Wang J, et al. Nat Commun. 2025 Apr 9;16(1):3350.

Patent US20180000819A1.

Liang B, et al. J Chromatogr B Analyt Technol Biomed Life Sci. 2025 May 16;1261:124658.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com