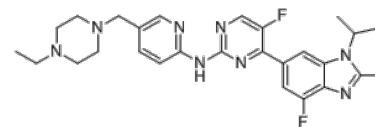


**Product Name** : Abemaciclib  
**Cat. No.** : PC-20589  
**CAS No.** : 1231929-97-7  
**Molecular Formula** : C<sub>27</sub>H<sub>32</sub>F<sub>2</sub>N<sub>8</sub>  
**Molecular Weight** : 506.61  
**Target** : Cyclin-dependent Kinase (CDK)  
**Solubility** : 10 mM in DMSO



CAS: 1231929-97-7

## Biological Activity

Abemaciclib (LY2835219) is a potent, selective and ATP-competitive **CDK4/6** inhibitor with K<sub>i</sub> values of 0.6 and 2.4 nM for CDK4/cyclin D1 and CDK6/cyclin D1, respectively.

Abemaciclib (LY2835219) inhibits CDK4/cyclin D1 and CDK6/cyclin D1 with IC<sub>50</sub> of 2 and 10 nM, respectively, with high selectivity against CDK1/cyclin B1, CDK2/cyclin E, and CDK7/Mat1/cyclin H.

Abemaciclib (LY2835219) is a potent inhibitor of Rb phosphorylation (IC<sub>50</sub>=120 nM) in colo-205 cells, induces a complete cell cycle arrest and suppresses expression of several Rb-E2F-regulated proteins.

Abemaciclib (LY2835219) inhibits tumor growth in human tumor xenografts representing different histologies in tumor-bearing mice.

Abemaciclib (LY2835219) in combination with gemcitabine enhanced in vivo antitumor activity without a G1 cell cycle arrest in calu-6 xenografts.

## References

Tate SC, et al. *Clin Cancer Res.* 2014 Jul 15;20(14):3763-74.

Gelbert LM, et al. *Invest New Drugs.* 2014 Oct;32(5):825-37.

Yadav V, et al. *Mol Cancer Ther.* 2014 Oct;13(10):2253-63.

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

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