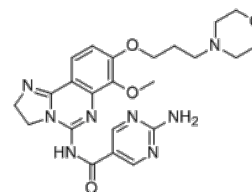


**Product Name** : Copanlisib  
**Cat. No.** : PC-20534  
**CAS No.** : 1032568-63-0  
**Molecular Formula** : C<sub>23</sub>H<sub>28</sub>N<sub>8</sub>O<sub>4</sub>  
**Molecular Weight** : 480.53  
**Target** : PI3K  
**Solubility** : 10 mM in DMSO



CAS: 1032568-63-0

## Biological Activity

Copanlisib (BAY 80-6946) is a potent, highly selective pan-**class I PI3K** inhibitor with IC<sub>50</sub> of 0.5, 3.7, 6.4, and 0.7 nM for PI3K $\alpha$ ,  $\beta$ ,  $\gamma$ , and  $\delta$  isoforms, respectively.

BAY 80-6946 shows significantly weaker activity against mTOR with an IC<sub>50</sub> of 45 nM, does not inhibit PI4K-II, PIP4-5K, PIP5-4K, or an additional 220 kinases in the Millipore kinase panel (inhibition <30%) at 1  $\mu$ M.

BAY 80-6946 reduces basal levels of AKT phosphorylation at both Thr308 and Ser473 with IC<sub>50</sub> values of 0.4 and 0.6 nmol/L, respectively, in KPL4 cells.

BAY 80-6946 is a potent inhibitor of tumor cell proliferation and shows activity in a subset of human cancer cell lines with PIK3CA mutations and/or overexpression of HER2.

BAY 80-6946 induces apoptosis in a subset of tumor cell lines that are resistant to lapatinib and trastuzumab.

BAY 80-6946 is highly efficacious in rat and mouse tumor xenograft models following intravenous administration.

## References

Liu N, et al. *Mol Cancer Ther.* 2013 Nov;12(11):2319-30.

Will M, et al. *Cancer Discov.* 2014 Mar;4(3):334-47.

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

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