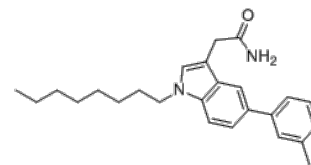


**Product Name** : Cysmethynil  
**Cat. No.** : PC-70250  
**CAS No.** : 851636-83-4  
**Molecular Formula** : C<sub>25</sub>H<sub>32</sub>N<sub>2</sub>O  
**Molecular Weight** : 376.5  
**Target** : Other Targets  
**Solubility** : 10 mM in DMSO



## Biological Activity

Cysmethynil is a selective small-molecule inhibitor of **tisoprenylcysteine carboxyl methyltransferase (Icmt)** with IC<sub>50</sub> <200 nM.

Cysmethynil does not inhibit other enzymes (farnesyltransferase, geranylgeranyltransferase type I, and Rce1) at concentrations up to 50 μM.

Cysmethynil acts as a competitive inhibitor with respect to the isoprenylated cysteine substrate and a noncompetitive inhibitor with respect to S-adenosylmethionine (K<sub>i</sub>=0.14 μM).

Cysmethynil causes decrease in Ras carboxymethylation, mislocalization of Ras, and impaired signaling through Ras pathways, reduces mTOR signaling and results in both an accumulation of cells in the G(1) phase and cell death in PC3 cells.

## References

Winter-Vann AM, et al. *Proc Natl Acad Sci U S A*. 2005 Mar 22;102(12):4336-41.

Baron RA, et al. *Biochemistry*. 2007 Jan 16;46(2):554-60.

Wang M, et al. *J Biol Chem*. 2008 Jul 4;283(27):18678-84.

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

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