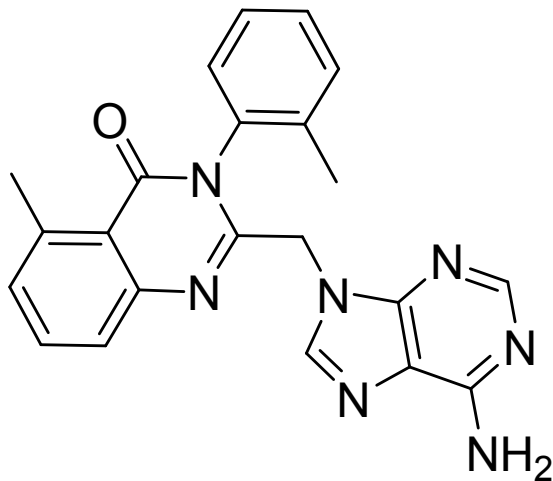


**IC87114**

**SYN-1045**



2-((6-amino-9H-purin-9-yl)methyl)-5-methyl-3-o-tolylquinazolin-4(3H)-one

CAS Registry No.: 371242-69-2

Smiles String:

Cc1cccc1n2c(nc3cccc(c3c2=O)C)Cn4cnc5c4ncnc5N

Molecular Weight: 397.43

Molecular Formula: C<sub>22</sub>H<sub>19</sub>N<sub>7</sub>O

Lot Number: Refer to vial

<sup>1</sup>H-NMR: Available on request

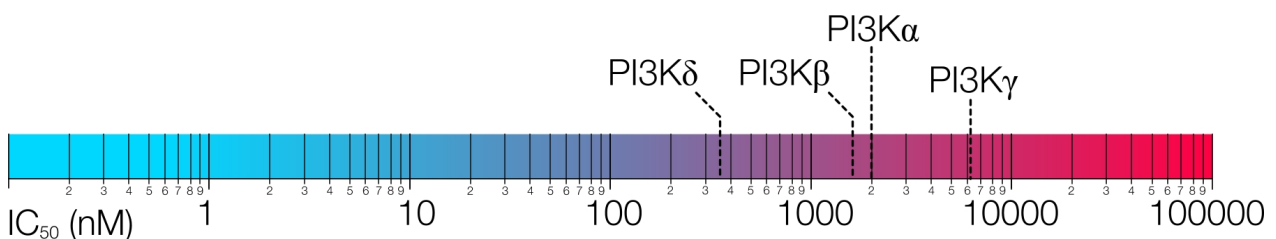
HPLC (Purity): > 95.0% @ 254 nm

ES-MS: Available on request

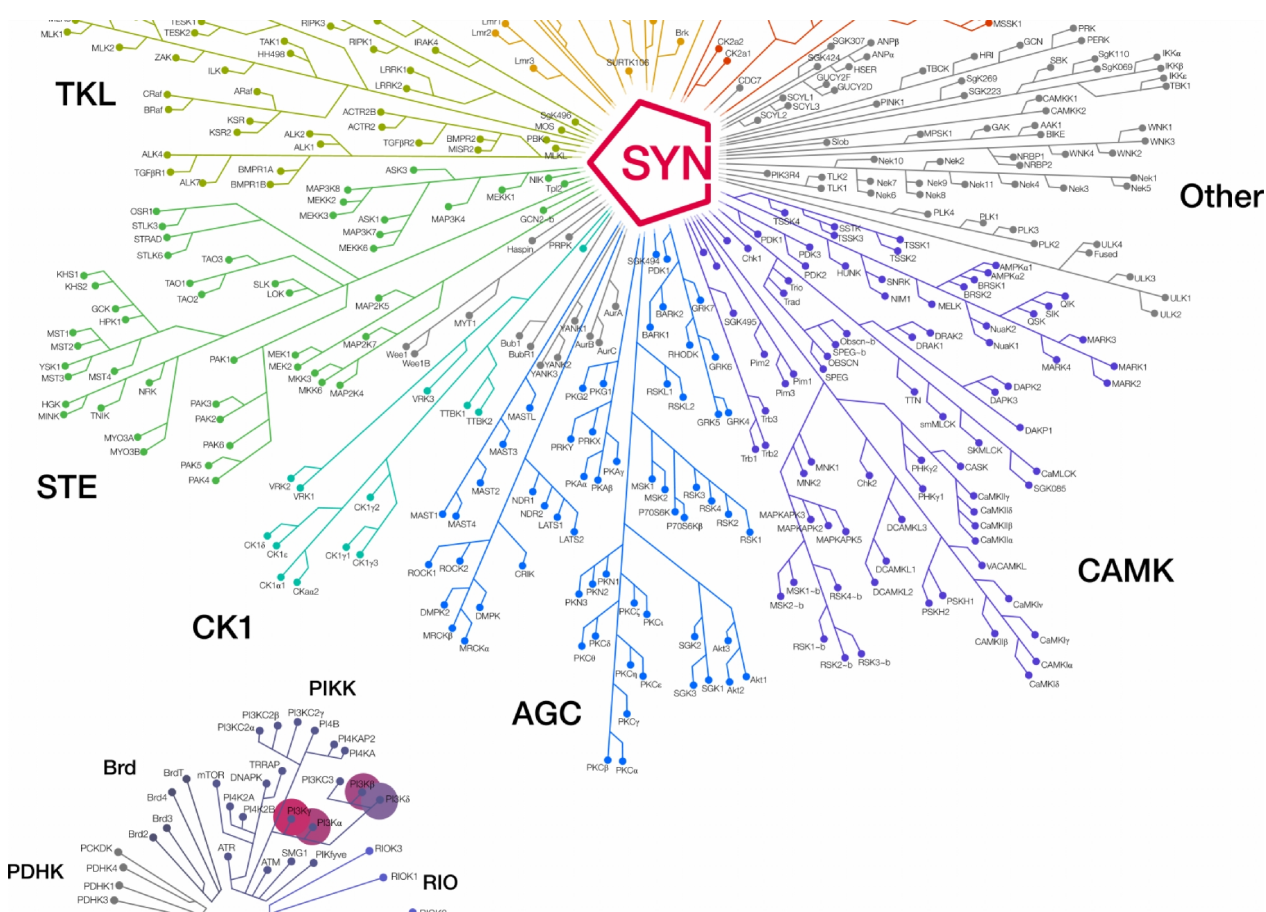
## Description:

IC87114 is a potent, ATP-competitive, and selective inhibitor of PI3Kdelta. IC<sub>50</sub> values (130-500nM) for IC87114 are sub-micromolar over a wide range of ATP concentrations from 10uM to 200uM. IC87114 can selectively inhibit cellular migration but not adhesion as well as cellular polarization. More recent work has shown the PI3Kdelta inhibition also plays a role in autoimmune disease suppression.

## Biological Activity



# Kinome Mapping



# Shipping and Storage Temperature

**Shipping:**  
Ambient

**Storage:**  
2 years -20C, Powder 1 month, -4C in DMSO, More than one month -80C in DMSO

# Solubility

DMSO 0.66mg/mL, Ethanol <1mg/mL

---

## Preparing Stock Solutions

Stock Solution (1ml DMSO)	1mM	10mM	20mM	50mM
Mass(mg)	0.3975	3.9750	7.9500	19.8750

---

## References

1. Berndt A, Miller S, Williams O, Le DD, Houseman BT, Pacold JI, Gorrec F, Hon WC, Liu Y, Rommel C, Gaillard P, Rückle T, Schwarz MK, Shokat KM, Shaw JP, Williams RL . The p110 delta structure: mechanisms for selectivity and potency of new PI(3)K inhibitors. Nat Chem Biol. 2010 Feb;6(2):117-24. doi: 10.1038/nchembio.293.
2. Cushing TD, Metz DP, Whittington DA, McGee LR . PI3K  $\delta$  and PI3K  $\gamma$  as targets for autoimmune and inflammatory diseases. J Med Chem. 2012 Oct 25;55(20):8559-81. doi: 10.1021/jm300847w. Epub 2012 Sep 13.
3. Sadhu C, Masinovskiy B, Dick K, Sowell CG, Staunton DE . Essential role of phosphoinositide 3-kinase delta in neutrophil directional movement. J Immunol. 2003 Mar 1;170(5):2647-54.

---

## Ordering Information

To order more of this or any other SYNkinase compound, go to [synkinase.com](http://synkinase.com), Call us Toll Free (US Only) at 1- 877-854-6273 or email [orders@synkinase.com](mailto:orders@synkinase.com).

Product Datasheet (Rev. 1.1)