

Data Sheet

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Global Supplier of Chemical Probes, Inhibitors & Agonists.

 Product Name
 : YY002

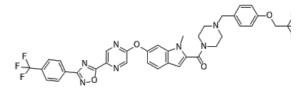
 Cat. No.
 : PC-22095

 CAS No.
 : 2591440-75-2

 Molecular Formula
 : C₃₆H₂₉F₆N₇O₄

Molecular Weight : 737.66
Target : STAT

Solubility : 10 mM in DMSO



CAS: 2591440-75-2

Biological Activity

YY002 is a potent, selective **STAT3** inhibitor, selectively binds to the STAT3 Src Homology 2 (SH2) domain (KD=2.24 nM) over other STAT members, inhibits STAT3 Tyr705 and Ser727 phosphorylation.

YY002 strongly suppresses STAT3 nuclear and mitochondrial functions in STAT3-dependent cells.

YY002 also shows no obvious inhibition on tyrosine kinases or serine kinases.

YY002 potently suppresses pancreatic cancer cells with high pSTAT3 (Tyr705 and Ser727) with IC50 of 3-11 nM.

YY002 inhibits colony formation of multiple STAT3-dependent PDAC cells at concentration of 1 to 10 nM.

YY002 inhibits STAT3 Ser727 phosphorylation and mitochondrial OXPHOS.

YY002 (5 mg/kg/d to 20 mg/kg/d, oral) inhibits pancreatic cancer growth in PANC-1 tumor mouse xenograft models.

References

Huang Chen, et al. ACS Cent Sci. 2024 Feb 10;10(3):579-594.

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

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