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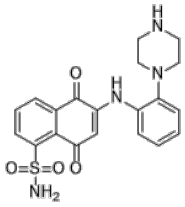
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	LLY17
Cat. No.	:	PC-24625
CAS No.	:	1556861-34-7
Molecular Formula	:	$C_{20}H_{20}N_4O_4S$
Molecular Weight	:	412.46
Target	:	STAT
Solubility	:	10 mM in DMSO



CAS: 1556861-34-7

Biological Activity

LLY17 (Compound 9) is an orally available, potent, and selective **STAT3** inhibitor, directly and selectively inhibits the **pY705** site of STAT3 with Ki of 400 nM.
LLY17 is highly selective in targeting of cancer cells with IC50 of 0.7 uM against MDA-MB-231, >150 fold selective over MCF-10A normal breast epithelial cells.
LLY17 inhibits multiple types of cancer cells, i.e., the UW426, UW288-1, BKPC3, MDA-MB-231, and U2OS cell lines.
LLY17 directly bound to the STAT3 protein with a Ki value of 2.42 ± 0.26 μM. The ligand:protein molar ratio was determined to be 1:1.
LLY17 selectively inhibited pY705-STAT3 protein. selectively inhibited p-STAT3(Y705) and interleukin 6 (IL-6)-induced phosphorylation of STAT3, without any inhibition of p-STAT1(Y701).
LLY17 induced the expression of STAT3 phosphatase (SHP-1), blocked STAT3 nuclear translocation.
LLY17 (2.5 mg/kg, 5 mg/kg) induced significant antitumor responses in vivo.

References

Wenying Yu, et al. ***J Med Chem.*** 2017 Apr 13;60(7):2718-2731.

Pan L, et al. ***Breast Cancer Res Treat.*** 2020 May;181(1):31-41.

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