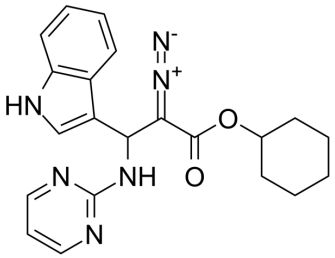
Syk-IN-6

Cat. No.:	HY-151634
CAS No.:	3018859-95-2
Molecular Formula:	$C_{21}H_{22}N_6O_2$
Molecular Weight:	390.44
Target:	Syk; STAT; ERK
Pathway:	Protein Tyrosine Kinase/RTK; JAK/STAT Signaling; Stem Cell/Wnt; MAPK/ERK Pathway
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Syk-IN-6 is an inhibitor of the lipid-SH2 domain interaction, control the cellular activity of kinases containing SH2 domain. Syk-IN-6 blocks Syk kinase activity, which associated hematopoietic malignancies, including acute myeloid leukemia (AML) [1].

IC_{50} & Target	ERK2	ERK1	STAT3	STAT5

In Vitro

Syk-IN-6 (WC36) specifically and potently suppresses oncogenic activities of Syk in AML cell lines and patient-derived AML cells[1].

Syk-IN-6 (5 μM; 16 h) inhibits FcγRI-specific antibody (IgG2)-stimulated phosphorylation of Syk, STAT3/STAT5 and ERK1/2 in naive MV4-11 cells rather not entospletinib-resistant/Syk-deficient MV4-11 cells[1].

Syk-IN-6 (0.01 μM-100 μM; 16 h) inhibits the proliferation of MV4-11 cells, HL-60 and patient-derived AML cells by SykcSH2 dose-dependently[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]

Cell Line:	Raji B cell, HL-60 cell, naive and entospletinib-resistant MV4-11 cells
Concentration:	5 μM, 10 μM
Incubation Time:	16 hours
Result:	Suppressed the phosphorylation and activation of Syk, ERK1/2 and STAT3/5 in entospletinib-resistant MV4-11 cells. Was potent against phosphorylation of ERK1/2 and STAT3 in HL-60 cells. Inhibited phosphorylation of Syk, ERK1/2 and STAT3/5 in AML cells from four patients refractory or relapsed following standard AML therapies.

REFERENCES

[1]. Singaram I, et al. Targeting lipid-protein interaction to treat Syk-mediated acute myeloid leukemia. Nat Chem Biol. 2022 Oct 13.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA