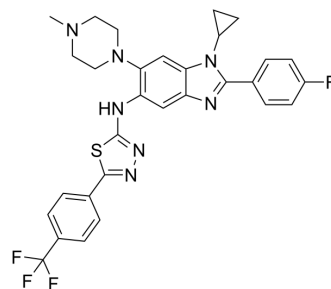


STAT3-IN-20

Cat. No.:	HY-155982		
CAS No.:	2768427-54-7		
Molecular Formula:	C ₃₀ H ₂₇ F ₄ N ₇ S		
Molecular Weight:	593.64		
Target:	STAT		
Pathway:	JAK/STAT Signaling; Stem Cell/Wnt		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (168.45 mM; ultrasonic and warming and heat to 80°C)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	1.6845 mL	8.4226 mL	16.8452 mL
5 mM	0.3369 mL	1.6845 mL	3.3690 mL
10 mM	0.1685 mL	0.8423 mL	1.6845 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

STAT3-IN-20 (Compound 40) is a selective STAT3 inhibitor (IC₅₀: 0.65 μM). STAT3-IN-20 binds the SH2 domain to inhibit STAT3 phosphorylation, translocation, and downstream gene transcription. STAT3-IN-20 exhibits antiproliferative activities against STAT3-overactivated DU145 and MDA-MB-231 cancer cells (IC₅₀: 2.97 μM and 3.26 μM respectively). STAT3-IN-20 induces cell cycle arrest and apoptosis^[1].

IC₅₀ & Target

0.65 μM (STAT3)^[1]

REFERENCES

[1]. Wang R, et al. Discovery, Optimization, and Evaluation of Novel N-(Benzimidazol-5-yl)-1,3,4-thiadiazol-2-amine Analogues as Potent STAT3 Inhibitors for Cancer Treatment. J Med Chem. 2023 Aug 18.

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

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