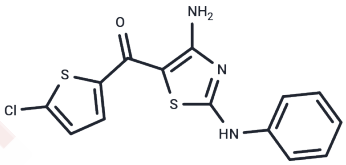
Data Sheet (Cat.No.T40443)

TargetMol

JAK2-IN-6

Chemical Properties



CAS No. :	353512-04-6
Formula:	C14H10ClN3OS2
Molecular Weight:	335.83
Storage:	Powder: -20°C for 3 years | In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.

Biological Description

Description	JAK2-IN-6, a polysubstituted aminothiazole derivative, is a potent and selective inhibitor of JAK2 (ic50 at 22.86 μg/mL). Jak2-in-6 inhibits the activity of JAK2 enzymes by interfering with Jak2-related signaling pathways, thereby producing therapeutic effects on the specific disease IN which JAK2 is dysregulated, and does not show activity on JAK1 and JAK3. JAK2 is a protein involved in signaling pathways that regulate cell growth and division. Abnormal activation of JAK2 has been linked to a variety of diseases, including some types of cancer and inflammatory diseases. JAK2-IN-6 has antiproliferative activity against cancer cells.
Targets(IC50)	JAK
In vitro	The treatment of JAK2-IN-6 (Compound B2; 6.3-50 μg/mL; 48 hours) demonstrates significant antiproliferative activity against PC-9, H1975, and PANC-1 cell lines. The IC50 values for PC-9, H1975, and PANC-1 cell lines are 18.1 μg/mL, 58.3 μg/mL, and 40.6 μg/mL, respectively [1].

Solubility Information

Solubility	DMSO: 55 mg/mL (163.77 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.9777 mL	14.8885 mL	29.777 mL
5 mM	0.5955 mL	2.9777 mL	5.9554 mL
10 mM	0.2978 mL	1.4888 mL	2.9777 mL
50 mM	0.0596 mL	0.2978 mL	0.5955 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Yao T T, et al. Integration of pharmacophore mapping and molecular docking in sequential virtual screening: towards the discovery of novel JAK2 inhibitors. RSC advances, 2017, 7(17): 10353-10360.