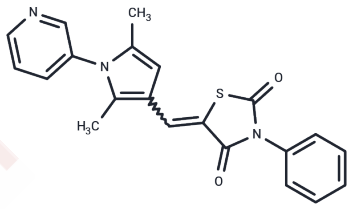
Data Sheet (Cat.No.T4486)

TargetMol

iCRT 14

Chemical Properties



CAS No. : 677331-12-3

Formula: C21H17N3O2S

Molecular Weight: 375.44

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	iCRT 14 is a novel and potent inhibitor of β-catenin-responsive transcription (CRT) with an IC50 of 40.3 nM in assays of Wnt pathway activity.
Targets(IC50)	Wnt/beta-catenin
In vitro	iCRT14 can interfere with TCF binding to DNA in addition to its ability to influence TCF-β-cat interaction. iCRT14 (10, 25, 50 μM) effectively inhibits cell proliferation in BT-549 cells in a dose- and time-dependent manner but is still less potent than iCRT3.
In vivo	CRT14 (50 mg/kg, i.p.) markedly decreases CycD1, proliferation of the tumors in HCT116 xenografts.

Solubility Information

Solubility	DMSO: 35.71 mg/mL (95.12 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (5.33 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6635 mL	13.3177 mL	26.6354 mL
5 mM	0.5327 mL	2.6635 mL	5.3271 mL
10 mM	0.2664 mL	1.3318 mL	2.6635 mL
50 mM	0.0533 mL	0.2664 mL	0.5327 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

Gonsalves FC, et al. An RNAi-based chemical genetic screen identifies three small-molecule inhibitors of the Wnt/wingless signaling pathway. Proc Natl Acad Sci USA. 2011 Apr 12;108(15):5954-63.
Wang C, Wang T, Hu R, et al.9-Butyl-Harmol Exerts Antiviral Activity against Newcastle Disease Virus through Targeting GSK-3β and HSP90β.Journal of Virology.2023: e01984-22.
Bilir B, et al. Wnt signaling blockage inhibits cell proliferation and migration, and induces apoptosis in triple-negative breast cancer cells. J Transl Med. 2013 Nov 4;11:280.
Wang T, Wang C, Han J, et al.β-catenin facilitates fowl adenovirus serotype 4 replication through enhancing virus-induced autophagy.Veterinary Microbiology.2022: 109617.
Wang C, Wang T, He Q, et al.Inhibition of the canonical Wnt/β-catenin pathway interferes with macropinocytosis to suppress pseudorabies virus proliferation.Veterinary Microbiology.2025: 110373.