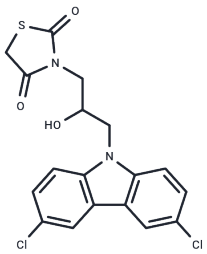
Data Sheet (Cat.No.T9628)

TargetMol

10074-A4

Chemical Properties



CAS No. : 312631-87-1

Formula: C18H14Cl2N2O3S

Molecular Weight: 409.29

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	10074-A4 is a c-Myc binding compound that associates with c-Myc[370-409] and acts as a "ligand cloud" around a "protein cloud", exhibiting distinct characteristics compared to a non-binding ligand.
Targets(IC50)	c-Myc
In vitro	10074-A4 showed binding affinity with c-Myc370-409 with Kd of 36.3?±?9.0?μM and EC50 of 15.1?±?2.3?μM[2].10074-A4 arrests the cell cycle at the S-phase in a dose-dependent manner in HL-60 cells[2].

Solubility Information

Solubility	DMSO: 100 mg/mL (244.33 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: 4 mg/mL (9.77 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	2.4433 mL	12.2163 mL	24.4326 mL
5 mM	0.4887 mL	2.4433 mL	4.8865 mL
10 mM	0.2443 mL	1.2216 mL	2.4433 mL
50 mM	0.0489 mL	0.2443 mL	0.4887 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

Fan Jin, et al. Ligand clouds around protein clouds: a scenario of ligand binding with intrinsically disordered proteins. PLoS Comput Biol. 2013;9(10):e1003249.
Liu W, Chen L, Yin D, et al.Visualizing single-molecule conformational transition and binding dynamics of intrinsically disordered proteins.Nature Communications.2023, 14(1): 5203.
Chen Yu, et al. Structure-based Inhibitor Design for the Intrinsically Disordered Protein c-Myc. Sci Rep. 2016 Mar 2; 6:22298.