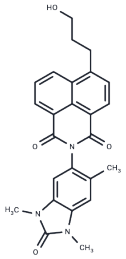
Data Sheet (Cat.No.T14502)

TargetMol

BAY-299

Chemical Properties



CAS No. : 2080306-23-4

Formula: C25H23N3O4

Molecular Weight: 429.47

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	BAY-299 is an effecitve inhibitor of the bromodomain and PHD finger family member BRPF2 and the TATA box binding protein-associated factors TAF1 and TAF1L with IC50s of 67 nM, 8 nM, and 106 nM, respectively.
Targets(IC50)	Epigenetic Reader Domain,Carboxypeptidase
In vitro	BAY-299 inhibits the cells proliferation of NCI-H526, CHL-1, MOLM-13, MV4-11, 769-P, Jurkat, and 5637 with GI50s of 6860, 7400, 1060, 2630, 3210, 3900, and 7980 nM, respectively. BAY-299 blocks the interaction of BRPF2 BD with H4 and H3.3 with IC50s of 575 and 825 nM, respectively[1].
In vivo	The in vivo pharmacokinetic properties of BAY-299 in rats show are blood clearance is low (17% of hepatic blood flow), terminal half-life long to very long with t1/2 of 10 h, volume of distribution in steady-state high, and bioavailability high with F of 73%[1].

Solubility Information

Solubility	DMSO: 20 mg/mL (46.57 mM),Sonication and heating are 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 (4.66 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	2.3285 mL	11.6423 mL	23.2845 mL
5 mM	0.4657 mL	2.3285 mL	4.6569 mL
10 mM	0.2328 mL	1.1642 mL	2.3285 mL
50 mM	0.0466 mL	0.2328 mL	0.4657 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

Bouché L, et al. Benzoisoquinolinediones as Potent and Selective Inhibitors of BRPF2 and TAF1/TAF1L Bromodomains. J Med Chem. 2017 May 11;60(9):4002-4022.