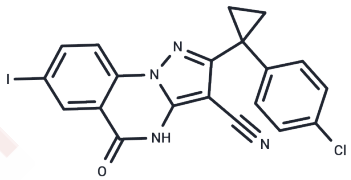
Data Sheet (Cat.No.T35548)

TargetMol

Dynapyrazole A

Chemical Properties



CAS No. : 2226517-75-3

Formula: C20H12ClIN4O

Molecular Weight: 486.69

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	Dynapyrazole A is a specific inhibitor of microtubule dynamin with IC50s of 2.3 and 2.6 μM for dynein 1 and dynein 2-dependent microtubule gliding, and it inhibits Hedgehog signaling with an IC50 of 1.9 μM.
Targets(IC50)	Dynamin
In vitro	Dynapyrazole A displays reversible inhibition of retrograde and anterograde intraflagellar transport in Chlamydomonas. In MA-104 cells infected with the RVA-NMTL virus, Dynapyrazole A (1-3 μg/mL) dose-dependently reduces viral titers with an EC50 of 0.73 μg/mL[1].

Solubility Information

Solubility	DMSO: 22.5 mg/mL (46.23 mM),Sonication and heating to 60℃ 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 (4.11 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	2.0547 mL	10.2735 mL	20.547 mL
5 mM	0.4109 mL	2.0547 mL	4.1094 mL
10 mM	0.2055 mL	1.0273 mL	2.0547 mL
50 mM	0.0411 mL	0.2055 mL	0.4109 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

Zhaoyang Jing, et al. Rotavirus Viroplasm Biogenesis Involves Microtubule-Based Dynein Transport Mediated by an Interaction between NSP2 and Dynein Intermediate Chain. J Virol. 2021 Oct 13;95(21):e0124621.