JQKD82 trihydrochloride

Cat. No.: HY-138691A

CAS No.: 2863676-87-1

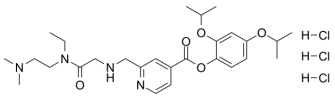
Molecular Formula: $C_{27}H_{43}Cl_3N_4O_5$

Molecular Weight: 610.01

Target: Histone Demethylase

Pathway: Epigenetics

Storage: 4°C, sealed storage, away from moisture
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (81.97 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	1.6393 mL	8.1966 mL	16.3932 mL
	5 mM	0.3279 mL	1.6393 mL	3.2786 mL
	10 mM	0.1639 mL	0.8197 mL	1.6393 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 1 mg/mL (1.64 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 1 mg/mL (1.64 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 1 mg/mL (1.64 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

JQKD82 (JADA82) trihydrochloride is a cell-permeable and selective KDM5 inhibitor. JQKD82 trihydrochloride increases H3K4me3 and can be used for the research of multiple myeloma[1].

IC_{50} & Target

KDM5

In Vitro

JQKD82 (0.3 μM; 24 hours) trihydrochloride causes an increase in the global H3K4me3 level of MM.1S cells[1].
?JQKD82 (0.1-10 μM; day 1-day 5) trihydrochloride inhibits the growth of MM.1S cells in a dose- and time-dependent manner. JQKD82 trihydrochloride is potent at eliciting growth suppression in MM.1S cells (IC_{50}=0.42 μM)[1].
?JQKD82 (1 μM; 24 hours) trihydrochloride induces G1 cell-cycle arrest by 48 hours in MM.1S and MOLP-8 cells[1].

	MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	JQKD82 (50-75 mg/kg; i.p.; twice a day for 3 weeks) trihydrochloride has anti-multiple myeloma activity[1]. ?JQKD82 trihydrochloride displays an increase in H3K4me3 levels and results in a dramatic reduction of MYC immuno-staining in vivo[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Six-week-old female NOD.Cg-Prkdcscid Il2rgtm1Wjl/SzJ (NSG) mice (bearing MOLP-8 TurboGFP-Luc cells)[1]
Dosage:	50 mg/kg, 75 mg/kg
Administration:	i.p.; twice a day for 3 weeks
Result:	Significantly reduced tumor burden.

REFERENCES

[1]. Jun Qi, et al. Histone demethylase 5 inhibitors and uses thereof. WO2020033377A1.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA