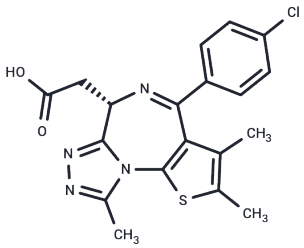
Data Sheet (Cat.No.T5443)

TargetMol

JQ-1 (carboxylic acid)

Chemical Properties



CAS No. : 202592-23-2

Formula: C19H17ClN4O2S

Molecular Weight: 400.88

Storage: Keep away from direct sunlight
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	JQ-1 (carboxylic acid) is a cell-permeable BRD4 inhibitor with IC50s of 77 nM for BRD4(1) and 33 nM for BRD4(2)
Targets(IC50)	Epigenetic Reader Domain,PD-1/PD-L1
In vitro	JQ-1 carboxylic acid is an inhibitor of bromodomain and extra terminal domain (BET) family proteins, blocking their interaction with acetylated histones[1],it has been used as a chemical probe to investigate the role of BET bromodomains in the transcriptional regulation of oncogenesis[2][3].

Solubility Information

Solubility	Ethanol: 12.5 mg/mL (31.18 mM),Sonication is recommended. DMSO: 125 mg/mL (311.81 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (24.95 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (24.95 mM),Solution. *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	2.4945 mL	12.4726 mL	24.9451 mL
5 mM	0.4989 mL	2.4945 mL	4.989 mL
10 mM	0.2495 mL	1.2473 mL	2.4945 mL
50 mM	0.0499 mL	0.2495 mL	0.4989 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

Rosner M , Hengstschl?Ger M . Targeting Epigenetic Readers in Cancer[J]. New England Journal of Medicine, 2012, 367(18):1764-1765.

Zhao L, Zhu Y, Tao H, et al.Ailanthone ameliorates pulmonary fibrosis by suppressing JUN-dependent MEOX1 activation.Acta Pharmaceutica Sinica B.2024

Dawson M A , Prinjha R K , Dittmann A , et al. Inhibition of BET recruitment to chromatin as an effective treatment for MLL-fusion leukaemia[J]. Nature, 2011, 478(7370):529-533.

Mertz J A , Conery A R , Bryant B M , et al. Targeting MYC dependence in cancer by inhibiting BET bromodomains[J]. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108(40):16669-16674.

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