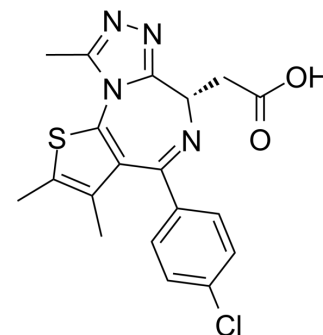


## JQ-1 (carboxylic acid)

<b>Cat. No.:</b>	HY-78695
<b>CAS No.:</b>	202592-23-2
<b>Molecular Formula:</b>	C <sub>19</sub> H <sub>17</sub> ClN <sub>4</sub> O <sub>2</sub> S
<b>Molecular Weight:</b>	400.88
<b>Target:</b>	Epigenetic Reader Domain; PD-1/PD-L1
<b>Pathway:</b>	Epigenetics; Immunology/Inflammation
<b>Storage:</b>	Powder    -20°C    3 years 4°C        2 years In solvent   -80°C    2 years -20°C    1 year



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 31.25 mg/mL (77.95 mM); ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.4945 mL	12.4726 mL	24.9451 mL
	5 mM	0.4989 mL	2.4945 mL	4.9890 mL
	10 mM	0.2495 mL	1.2473 mL	2.4945 mL

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

#### In Vivo

- Add each solvent one by one: 5% DMSO >> 40% PEG300 >> 5% Tween-80 >> 50% saline  
Solubility: ≥ 2.5 mg/mL (6.24 mM); Clear solution
- Add each solvent one by one: 5% DMSO >> 95% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.5 mg/mL (6.24 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 1.39 mg/mL (3.47 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 1.39 mg/mL (3.47 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 1.39 mg/mL (3.47 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

JQ-1 carboxylic acid, a (+)-JQ-1 (HY-13030) derivative, is a potent BET bromodomain inhibitor. JQ-1 carboxylic acid can be used to synthesize PROTAC, which can target the degradation of BRD4.

## In Vitro

JQ-1 carboxylic acid downregulates PD-L1 expression on the surface of B16F10 cells<sup>[1]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## CUSTOMER VALIDATION

- Nucleic Acids Res. 2022 May 20;50(9):4917-4937.
- Cell Death Dis. 2020 Jun 15;11(6):459.
- Biochem Pharmacol. 2023 Mar 11;210:115497.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

[1]. Huang Y, et, al. Design, Synthesis, and Evaluation of Trivalent PROTACs Having a Functionalization Site with Controlled Orientation. *Bioconjug Chem.* 2022 Jan 19;33(1):142-151.

[2]. Chen W, et, al. Dual drugs decorated bacteria irradiate deep hypoxic tumor and arouse strong immune responses. *Biomaterials.* 2022 Jul;286:121582.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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