# INCB059872 dihydrochloride

**Cat. No.:** HY-141677A

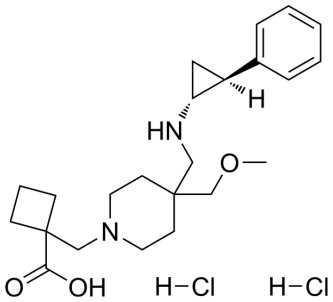
**Molecular Formula:** $C_{23}H_{36}Cl_2N_2O_3$

**Molecular Weight:** 459.45

**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 : 3.57 mg/mL (7.77 mM; ultrasonic and warming and heat to 60°C)

| Preparing Stock Solutions | Solvent / Mass / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|---|
| | 1 mM | 2.1765 mL | 10.8826 mL | 21.7652 mL |
| | 5 mM | 0.4353 mL | 2.1765 mL | 4.3530 mL |
| | 10 mM | --- | --- | --- |

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

## BIOLOGICAL ACTIVITY

**Description**

INCB059872 dihydrochloride is a potent, orally active, selective and irreversible Lysine-Specific Demethylase 1 (LSD1) inhibitor. INCB059872 dihydrochloride can be used for the research of myeloid leukemia[1].

**$IC_{50}$ & Target**

KDM1/LSD1

**In Vitro**

INCB059872 (25 nM; 48 hours; 293T cells) dihydrochloride increases enhancer activity and gene expression[1].
INCB059872 (25 nM; 24 hours; THP-1 cells) dihydrochloride makes THP-1 show a growth defect within one cell doubling time or approximately 3 days[1].
INCB059872 (THP-1 cells) dihydrochloride regulates PRO-seq analysis identifies genes and enhancers[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]

| | |
|---|---|
| Cell Line: | 293T cells |
| Concentration: | 250 nM |
| Incubation Time: | 48 hours |

| | |
|---|---|
| Result: | Increased enhancer activity and gene expression. |

**In Vivo**

INCB059872 (10 mg/kg; p.o.; 0, 4, or 6 days; C57BL/6J mice) dihydrochloride makes single-cell RNA-seq revealing changes in bone marrow progenitor populations[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

| | |
|---|---|
| Animal Model: | C57BL/6J mice[1] |
| Dosage: | 10 mg/kg |
| Administration: | p.o.; 0, 4, or 6 days |
| Result: | Single-cell RNA-seq revealed changes in bone marrow progenitor populations. |

## REFERENCES

[1]. Johnston G, et al. Nascent transcript and single-cell RNA-seq analysis defines the mechanism of action of the LSD1 inhibitor INCB059872 in myeloid leukemia. Gene. 2020;752:144758.

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

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