(2-Chloropyridin-4-yl)methanamine hydrochloride

Cat. No.: HY-101771A

CAS No.: 916210-98-5

Molecular Formula: $C_6H_8Cl_2N_2$

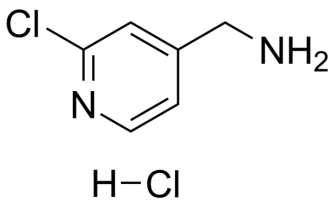
Molecular Weight: 179.05

Target: Monoamine Oxidase

Pathway: Neuronal Signaling

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

H_2O : ≥ 50 mg/mL (279.25 mM)

DMSO : ≥ 33 mg/mL (184.31 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	5.5850 mL	27.9252 mL	55.8503 mL
5 mM	1.1170 mL	5.5850 mL	11.1701 mL
10 mM	0.5585 mL	2.7925 mL	5.5850 mL

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

In Vivo

1. Add each solvent one by one: PBS
   Solubility: 100 mg/mL (558.50 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

(2-Chloropyridin-4-yl)methanamine hydrochloride is a selective LOXL2 inhibitor with an IC_{50} of 126 nM.

IC_{50} & Target

IC50: 126 nM (LOXL2)[1]

In Vitro

(2-Chloropyridin-4-yl)methanamine hydrochloride is shown to be selective for LOXL2 over LOX and three other amine oxidases (MAO-A, MAO-B and SSAO). In the human whole blood LOXL2 assay, (2-Chloropyridin-4-yl)methanamine hydrochloride has an IC_{50} of 1.45 μM compared to 126 nM in the absence of blood proteins. (2-Chloropyridin-4-yl)methanamine hydrochloride shows a 31-fold selectivity for LOXL2+BSA (IC_{50}=190 nM) over LOX+BSA (IC_{50}=5.91 μM). Against a panel of non-LTQ-containing AO enzymes (MAO-A, MAO-B and SSAO), LOXL2-IN-1 is found to be inactive at 30 μM. (2-Chloropyridin-4-yl)methanamine hydrochloride is profiled for the inhibition of three different CYP enzymes (CYPs 3A4, 2C9 and 2D6) and in each case the IC_{50} is more than 30 μM[1].

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

CUSTOMER VALIDATION

- Aging Cell. 2022 Jun 17;e13659.
- Oncol Rep. 2020 May;43(5):1641-1649.

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REFERENCES

[1]. Hutchinson JH, et al. Small Molecule Lysyl Oxidase-like 2 (LOXL2) Inhibitors: The Identification of an Inhibitor Selective for LOXL2 over LOX. ACS Med Chem Lett. 2017 Mar 1;8(4):423-427.

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