

Product Name : RN-1 dihydrochloride

Synonyms : —

Cat No. : M27442

CAS Number : 1781835-13-9

Molecular Formula : C₂₃H₃₁Cl₂N₃O₂

Formula Weight : 452.4

Chemical Name : —

Description : RN-1 dihydrochloride is an effective and selective irreversible inhibitor of lysine-specific demethylase 1 (LSD1, IC₅₀ = 70 nM). (In Vitro): RN-1 dihydrochloride exhibits selectivity for LSD1 over MAO-A and MAO-B with IC₅₀ values of 0.51 μM and 2.785 μM respectively. (In Vivo): In sickle cell disease (SCD) mice, RN-1 dihydrochloride (3-10 mg/kg; i.p.) effectively induces fetal hemoglobin (HbF) levels in red blood cells and reduces disease pathology. In C57BL/6 male mice, after administration of RN-1 dihydrochloride (10 mg/kg, i.p.), concentrations are detectable up to 24 h post dose in both plasma and brain tissues. RN-1 dihydrochloride significantly impairs long-term memory, but not short-term memory. The brain/plasma exposure ratio is 88.9.

Pathway : Chromatin/Epigenetic

Target : Histone Demethylase

Receptor : —

Solubility : —

SMILES : Cl.Cl.CN1CCN(CC1)C(=O)CNC1CC1c1ccc(OCc2ccccc2)cc1

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1. Ye W, Zhang Q, Hsiao WW, Zhao S, Che CT. New lupane glycosides from *Pulsatilla chinensis*. *Planta Med.* 2002;68(2):183-186.