

# S 2101

Catalog No: tcsc0033145



## Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg



## Specifications

CAS No:

1239262-36-2

Formula:

$C_{16}H_{16}ClF_2NO$

Pathway:

Epigenetics

Target:

Histone Demethylase

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Observed Molecular Weight:

311.75

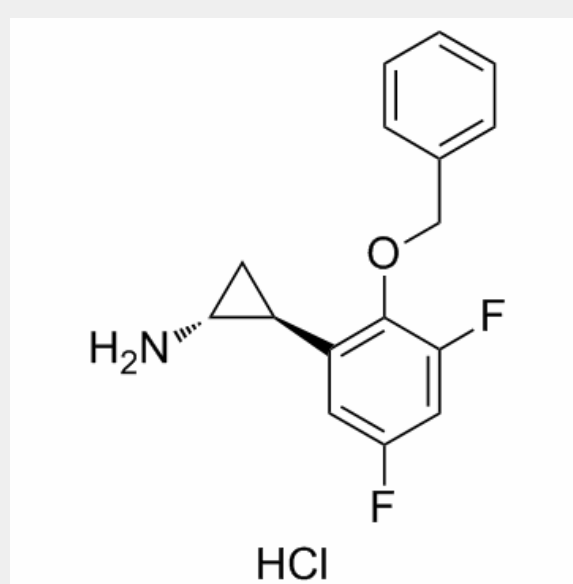
## Product Description

S 2101 is a **lysine-specific demethylase 1 (LSD1)** inhibitor with an **IC<sub>50</sub>** of 0.99 μM, **K<sub>i</sub>** of 0.61 μM and **K<sub>inact</sub>/K<sub>i</sub>** of 4560 M/s.

IC50 & Target: IC50: 0.99 μM (LSD1)<sup>[1]</sup>

K<sub>i</sub>: 0.61 μM (LSD1)<sup>[1]</sup>

***In Vitro:*** S 2101 is a lysine-specific demethylase 1 (LSD1) inhibitor with an IC<sub>50</sub> of 0.99 μM, K<sub>i</sub> of 0.61 μM and K<sub>inact</sub>/K<sub>i</sub> of 4560 M/s. S 2101 also displays much lower inhibition activity toward MAO-B (K<sub>i</sub>=17 μM, K<sub>inact</sub>/K<sub>i</sub>=18 M/s) and MAO-A (K<sub>i</sub>=110 μM, K<sub>inact</sub>/K<sub>i</sub>=60 M/s). The treatment of HEK293T cells with S 2101 results in a dose-dependent increase in the level of H3K4me2, which must have accumulated by the inactivation of LSD1. During the course of S 2101 treatment, the amounts of histone H3 and LSD1 in the nuclear extracts remain essentially unaffected. Because the treatment with 1 μM S 2101 generates a level of H3K4me2 similar to that elicited by 50 μM 2-PCPA, S 2101 is assumed to have approximately 50-fold stronger LSD1 inhibition activity than 2-PCPA in human cells<sup>[1]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!