

# A939572

## Catalog No: tcsc0305



### Available Sizes

**Size:** 2mg

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg



### Specifications

**CAS No:**

1032229-33-6

**Formula:**

$C_{20}H_{22}ClN_3O_3$

**Pathway:**

Metabolic Enzyme/Protease

**Target:**

Stearoyl-CoA Desaturase (SCD)

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq$  56 mg/mL (144.38 mM)

**Alternative Names:**

stearoyl-CoA desaturase (SCD) inhibitor;SCD-inhibitor

**Observed Molecular Weight:**

387.86

## Product Description

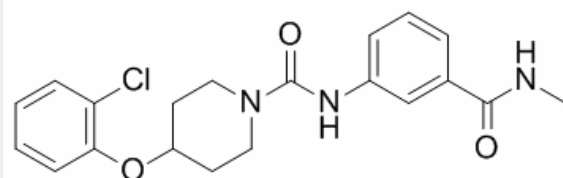
A939572 is a potent, and orally bioavailable **SCD1** inhibitor with **IC<sub>50</sub>** values of mSCD1 and **hSCD1**, respectively.

IC50 & Target: IC50: [1]

**In Vitro:** A939572 exhibits robust in vivo activity with dose-dependent desaturation index lowering effects<sup>[1]</sup>.

A939572 is a small molecule that specifically inhibits SCD1 enzymatic activity. A939572 demonstrates a significant dose-dependent decrease in proliferation in Caki1, A498, Caki2, and ACHN at day 5 (IC<sub>50</sub>s of 65 nM, 50 nM, 65 nM, and 6 nM, respectively). In A939572 (SCDi) treated Caki1 and A498 cells, all five ER stress related genes are expressed at significantly increased levels compared to DMSO+BSA control, and this elevated expression can be blocked with the addition of OA-BSA<sup>[2]</sup>.

**In Vivo:** Athymic nude (nu/nu) mice bearing A498 ccRCC xenografts are treated with A939572 (30mg/kg, p.o.) and Tem individually or in combination over the course of four weeks, and tumor volume (mm<sup>3</sup>) is recorded. A939572 and Tem monotherapy generate similar growth responses with approximately 20-30% reductions in tumor volume (vs. placebo control) being observed upon study completion, with values reaching statistical significance only within the last week of treatment. The combination group yields over a 60% decrease in tumor volume (vs. placebo control) by study completion with significant reductions recorded after approximately 1 week of treatment<sup>[2]</sup>.



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