Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

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 : ≥ 56 mg/mL (144.38 mM)

Alternative Names:
stearoyl-CoA desaturase (SCD) inhibitor;SCD-inhibitor

Observed Molecular Weight:
387.86

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Product Description

A939572 is a potent, and orally bioavailable **SCD1** inhibitor with **IC_{50}** 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[1].

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_{50}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[2].

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^3) 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[2].