

# A 922500

**Catalog No: tcsc0308**



## Available Sizes

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**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

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**CAS No:**

959122-11-3

**Formula:**

$C_{26}H_{24}N_2O_4$

**Pathway:**

Metabolic Enzyme/Protease

**Target:**

Acyltransferase

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 102.9$  mg/mL (240.15 mM)

**Alternative Names:**

DGAT-1 Inhibitor 4a

**Observed Molecular Weight:**

428.48

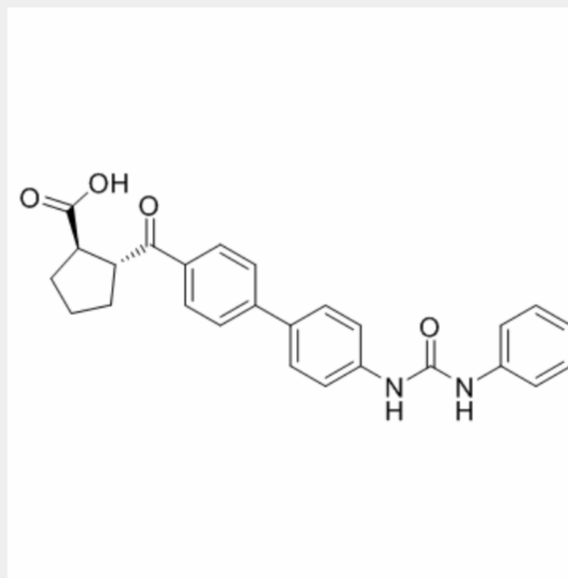
## Product Description

A 922500 is a potent, selective, and orally bioavailable **DGAT-1** inhibitor exhibiting **IC<sub>50</sub>** values of 9 and 22 nM against human and mouse DGAT-1, respectively.

IC50 & Target: IC50: 9 nM (human DGAT-1), 22 nM (mouse DGAT-1)<sup>[1]</sup>

**In Vitro:** A 922500 (A-922500) demonstrates excellent selectivity over other acyltransferases, including DGAT-2 (IC<sub>50</sub>=53 μM) and the phylogenetic family members acyl coenzyme A cholesterol acyltransferase-1 and -2 (IC<sub>50</sub>=296 μM) <sup>[1]</sup>.

**In Vivo:** DGAT-1 inhibitor A 922500 (A-922500) reduces serum triglyceride levels from baseline at all doses tested; however, this is only statistically significant at the 3 mg/kg dose, which lowers serum triglycerides by 53%. Similarly, the 3 mg/kg dose of A 922500 significantly reduces serum FFA concentrations by 55% and total cholesterol by 25%. DGAT-1 inhibition has no significant effect on body weight at any dose tested. Although A 922500 does not significantly affect LDL-cholesterol or HDL-cholesterol individually, the serum LDL/HDL-cholesterol ratio is significantly improved by A 922500 at 0.3 and 3 mg/kg. Similar to the dyslipidemic hamster, treatment with 3 mg/kg A 922500 significantly reduces serum triglyceride concentrations (39%). FFA levels significantly increase over the 14-day period in vehicle-treated animals. This increase is inhibited in a dose-dependent manner by A 922500 such that FFA concentrations are 32% lower after 14 days of treatment with the DGAT-1 inhibitor at 3 mg/kg, compared with the vehicle group (p [1]).



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