

# Dafadine-A

Catalog No: tcsc3184



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg



## Specifications

**CAS No:**

1065506-69-5

**Formula:**

$C_{23}H_{25}N_3O_3$

**Pathway:**

Metabolic Enzyme/Protease

**Target:**

Cytochrome P450

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 50 mg/mL (127.73 mM; Need ultrasonic)

**Observed Molecular Weight:**

391.46

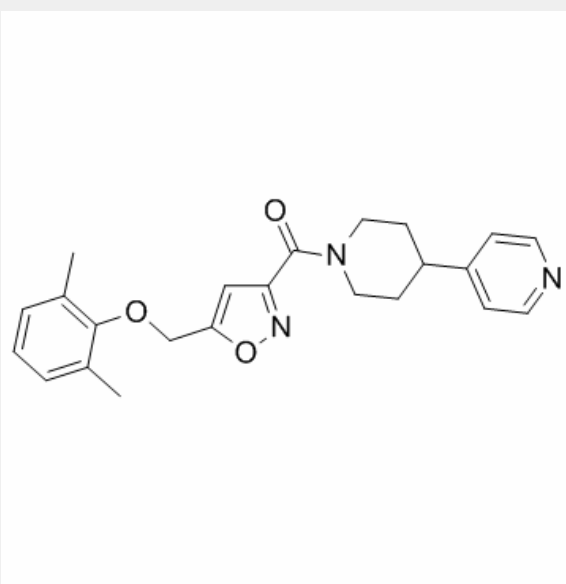
## Product Description

Dafadine-A, an analog of dafadine, is a novel inhibitor of DAF-9 cytochrome P450 in the nematode *Caenorhabditis elegans*; also inhibits the mammalian ortholog of DAF-9(CYP27A1).

IC50 value:

Target: DAF-9(CYP27A1) inhibitor

The DAF-9 cytochrome P450 is a key regulator of dauer formation, developmental timing and longevity in the nematode *Caenorhabditis elegans*. Here we describe the first identified chemical inhibitor of DAF-9 and the first reported small-molecule tool that robustly induces dauer formation in typical culture conditions. This molecule (called dafadine) also inhibits the mammalian ortholog of DAF-9(CYP27A1), suggesting that dafadine can be used to interrogate developmental control and longevity in other animals.



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