

**Product Name:** MK 386

**Catalog No.:** 5842

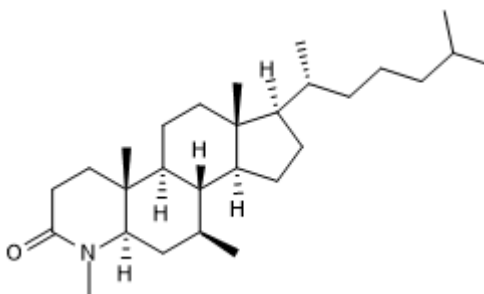
**Batch No.:** 1

CAS Number: 158493-17-5

IUPAC Name: (4a*R*,4b*S*,6a*R*,7*R*,9a*S*,9b*S*,10*S*,11a*R*)-7-[(1*R*)-1,5-Dimethylhexyl]hexadecahydro-1,4a,6a,10-tetramethyl-2*H*-indeno[5,4-*f*]quinolin-2-one

## 1. PHYSICAL AND CHEMICAL PROPERTIES

<b>Batch Molecular Formula:</b>	C <sub>28</sub> H <sub>49</sub> NO
<b>Batch Molecular Weight:</b>	415.69
<b>Physical Appearance:</b>	Colourless oil
<b>Solubility:</b>	DMSO to 100 mM
<b>Storage:</b>	Store at -20°C
<b>Batch Molecular Structure:</b>	



## 2. ANALYTICAL DATA

<b>TLC:</b>	R <sub>f</sub> = 0.4 (Ethyl acetate:Petroleum ether [2:3])
<b>HPLC:</b>	Shows >98.8% purity
<b><sup>1</sup>H NMR:</b>	Consistent with structure
<b>Mass Spectrum:</b>	Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

Potent and selective human type 1 5 $\alpha$ -reductase inhibitor (5 $\alpha$ R1, IC<sub>50</sub> = 0.9 nM). Exhibits 100-fold selectivity for 5 $\alpha$ R1 over 5 $\alpha$ R2 (IC<sub>50</sub> = 154 nM). Suppresses human serum and sebum dihydrotestosterone (DHT) levels in a dose-dependent manner without affecting semen DHT concentrations. Orally active.

**Physical and Chemical Properties:**

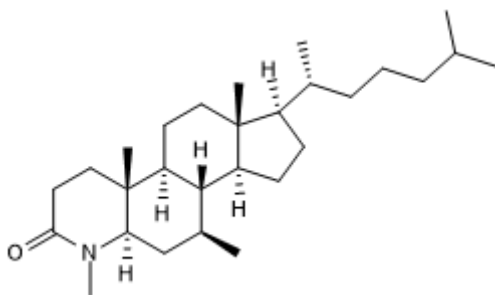
Batch Molecular Formula: C<sub>28</sub>H<sub>49</sub>NO

Batch Molecular Weight: 415.69

Physical Appearance: Colourless oil

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**References:**

**Schwartz et al** (1997) MK-386, an inhibitor of 5 $\alpha$ -reductase type 1, reduces dihydrotestosterone concentrations in serum and sebum without affecting dihydrotestosterone concentrations in semen. *J.Clin.Endocrinol.Metab.* **82** 1373. PMID: 9141518.

**Bakshi et al** (1994) 4,7 beta-Dimethyl-4-azacholestan-3-one (MK-386) and related 4-azasteroids as selective inhibitors of human type 1 5 alpha-reductase. *J.Med.Chem.* **37** 3871. PMID: 7966146.

**Storage:** Store at -20°C

**Solubility & Usage Info:**

DMSO to 100 mM

This product is supplied as a lyophilized oil and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

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